DOWNSTREAM IMPACTS OF WATER SUPPLY ALLOCATION AND MANAGEMENT ALONG THE APALACHICOLA-CHATTAHOOCHEE-FLINT RIVER BASIN AND THE ALABAMA-COOSA RIVER BASIN

(101-85)

HEARING

BEFORE THE

SUBCOMMITTEE ON WATER RESOURCES

OF THE

COMMITTEE ON PUBLIC WORKS AND TRANSPORTATION HOUSE OF REPRESENTATIVES

ONE HUNDRED FIRST CONGRESS

SECOND SESSION

SEPTEMBER 29, 1990, IN TALLAHASSEE, FLORIDA

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DOWNSTREAM IMPACTS OF WATER SUPPLY ALLOCATION AND MANAGEMENT ALONG THE APALACHICOLA-CHATTAHOOCHEE-FLINT RIVER BASIN AND THE ALABAMA-COOSA RIVER BASIN

SATURDAY, SEPTEMBER 29, 1990

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON WATER RESOURCES,
COMMITTEE ON PUBLIC WORKS AND TRANSPORTATION,
Tallahassee, FL.

The Subcommittee met pursuant to notice at 9:12 a.m. in the Jury Assembly Room, Plaza Level, Leon County Courthouse, 301 S. Monroe Street, Tallahassee, Florida, Hon. Henry Nowak (Chairman of the Subcommittee) presiding.

Present: Representatives Nowak, Stangeland and Grant.

Mr. NOWAK. Let the subcommittee come to order. Today the Subcommittee on Water Resources meets to receive testimony on issues of water use and downstream impacts on the Apalachicola-Chattahoochee-Flint and the Alabama-Coosa River Basins. Atlanta and many other towns in the region have benefited enormously from the abundant water supply provided by these river systems. At the same time, farmers and industrial facilities downstream have used river basin water to provide power to their local economies.

In addition the river system has supported a thriving seafood industry at its end-point where it enters into the Gulf of Mexico.

In the past the rivers of this region could easily meet all of these needs; however, growing demands for water have raised upstream/downstream conflicts to a new level of concern. This is not a problem unique to the residents of Georgia, Alabama and Florida. Upstream/downstream water use concerns have been raised in the river basins all across the country. As the population in the U.S. continues to grow and some of our major ground water resources dry up, this kind of conflict, I am sure, will increase.

The issue in this case is the reallocation of water storage at the Buford Dam for Atlanta. A workable solution that satisfies all parties may be possible. However, residents, local, state and federal officials will have to make every effort to listen to both upstream and downstream concerns and view this situation as a whole.

Yesterday the Subcommittee received testimony from the upstream interests. Today, we hope to gain a better understanding of the downstream impacts on the water supply needs. We have a range of witnesses representing business and environmental inter-

ests, and both local and federal government concerns. We look forward to hearing from you all.

Before we hear from our first witness, I wish to thank my colleague, Congressman Bill Grant, who represents the Second District and acknowledge his great interest in this matter, and at this time, I would like to yield to him for whatever opening remarks he would like to make.

Mr. GRANT. Thank you, Mr. Chairman. I appreciate you bringing the Committee to Tallahassee. We have some concerns. I would like to welcome Chairman Nowak from the State of New York and Arlan Stangeland from Minnesota, my colleagues on this Committee, to Tallahassee.

Today, we want to give those who are dependent on this system—and I emphasize the use of the word "system"—the ACF system, that live outside the city of Atlanta, to give them an opportunity to state their concerns of the methodology that was used by the Corps of Engineers to prepare their report and the report's lack of emphasis on environmental issues and long term impacts and the failure of the report to adequately address future growth downstream or the economic impacts to the Apalachicola Bay seafood industry.

In fact, the corps' current authorization does not recognize that seafood industry at Apalachicola Bay as an authorized project purpose of Lake Lanier. Mr. Chairman and Congressman Stangeland, I plan to introduce legislation that will change that.

The City of Atlanta is growing at a phenomenal rate, producing a healthy local economy and jobs for its people. And we all know about their fantastic success in Atlanta, getting the Olympics and other success stories. By contrast, and it is a contrast, Apalachicola Bay area has suffered the effects of two hurricanes in the past five years. It has had its oyster beds severely damaged. The near drought conditions have done more harm to that very tender ecological system. We do not believe that the burden of Atlanta's growth should be placed on the shoulders of the people of north Florida and Alabama.

Water wars are something that are fairly new to the southeastern part of the country. Our western friends—as we know in the Congress—have been struggling to meet the water needs of their citizens for a long time, but we have had plenty of water here in our part of the country. That no longer appears to be the case.

The Apalachicola-Chattahoochee-Flint River System is a system, and to manage it other than as a basin-wide system is just not acceptable. Any decision that Congress eventually makes must take into account the needs of the oystermen and fishermen of Apalachicola, the hydropower electric customers in Alabama, the residents of Atlanta, and of course, we have to take into consideration the possibility of irreversible damage to the environment. It is vital that we give careful consideration to the environmental impacts that this or any reallocation brings. We in Florida are familiar with the long-term impacts of bad environmental decisions.

Just this week, the House passed the Water Resources Development Act under the leadership of both these gentlemen. This bill, our Subcommittee drafted and in that bill was language that I developed to help facilitate the restoration of the Kissimmee River.

Some of you might remember the channelization of Kissimmee River was a debate in the State of Florida and in the Congress for a long time. It was a disaster—an unmitigated disaster—had monumental impact, contributed greatly to the pollution of Lake Okeechobee and the degradation of the once-thriving Everglades. We will correct the problem, but it is going to cost us somewhere around $300 million. So it is clear to me that protection is a lot cheaper than restoration.

The Apalachicola River, which was designated as an outstanding Florida water in 1982, has the greatest number of endangered plant species of any area in the State of Florida. And I think it would be foolish of us to reassume that reallocating 529 million gallons of water a day—only a portion of which would be returned as treated water—will have on that minor impact.

The decision that we make now on the reallocation of Lake Sidney Lanier are irreversible, will have repercussions well into the next century. Any reallocation proposal must include a full environmental impact study and must balance the needs of all who depend on the ACF system.

Mr. Chairman, I appreciate the Subcommittee's interest in this issue and sensitivity to the people of Florida, Alabama and Georgia, as evidenced by this hearing. Thank you.

Mr. NOWAK. Thank you very much. We would like to now introduce our minority leader on the Subcommittee in the House, Arlan Stangeland from Minnesota.

Mr. STANGELAND. Well, thank you, Mr. Chairman. First, let me commend you and our host, Bill Grant, for holding this very important hearing here in Tallahassee, Florida. I would like to commend my colleague, Mr. Grant, for his concern and interest and also for his effective and active membership on the Water Resources Subcommittee on a whole host of issues that affect us in this country on water.

You know, the importance of water sometimes has been forgotten, taking for granted the availability of an abundant supply of clear, clean pure drinking water for this country. But, it is now becoming apparent that we do not have adequate amounts of water to do the things we want to do in many parts of the country. Water was a prime concern of people back in ancient times when the Romans built aqueducts hundreds of miles to carry water. When this country was settled, it was apparent from the water wars waged in the West, that the people settling that area understood and knew the importance of water when they settled their lands.

Just recently, a very heated debate took place on the House floor over an issue that is similar to this one. Southwest Virginia Members of Congress want water from the Lake Gaston area of western Virginia and North Carolina, and the colleagues from North Carolina and western Virginia do not want to give up that water from Lake Gaston to serve Newport News and Virginia Beach. Congress will, of course, be the final arbitrator of this issue.

We have a similar argument here. Our purpose for being here is to weigh Atlanta's needs for water against the needs of those in the downstream areas. We know the importance of water in all areas of the country. As Congressman Grant has stated, it has not been that big an issue in the east—nowhere near as big an issue as it

has been in the west; but it is starting to become an issue as population grows and you see growth in certain areas.

So I look forward to the testimony today, Mr. Chairman. And hopefully, it will help us in our efforts to mediate this whole situation and try to do our best, so that all interests are served to the best of our ability. Thank you.

Mr. NOWAK. Thank you very much.

We will proceed a little out of order with our hearing agenda in that we would like to invite for their testimony now——

Mr. GRANT. Mr. Chairman, before we start, may I ask unanimous consent to enter in the record my prepared statement and the statements from the Commissioner of Education, Betty Castor; from David Jones, President of the Apalachicola Bay Oyster Farmers Association and George Chapel, Chairman of the Governor's Working Group on Apalachicola Bay Oyster Aquaculture Project.

Mr. NOWAK. Without objection.

[Mr. Grant's prepared statement follows:]

Statement of Congressman Bill Grant

Subcommittee on Water Resources

Tallahassee, Florida

September 29, 1990

It is a privilege for me to host a hearing of the Public Works and Transportation Subcommittee on Water Resources. I welcome my distinguished colleagues to Tallahassee.

Today, we will discuss in detail the downstream impacts of the U.S. Army Corps of Engineers' proposed reallocation of water from Lake Sidney Lanier to meet the growing demands of the City of Atlanta.

Yesterday, this subcommittee heard testimony from many Georgia city and county officials who concur with the Corps of Engineers' Post Authorization Change Notification Report.

Today, many of those dependent on the ACF system outside the City of Atlanta will have the opportunity to state their concerns with the methodology used by the Corps to prepare this report, the report's lack of emphasis on environmental issues and long term impacts and the failure of the report to adequately address future growth downstream or the economic impacts to the Apalachicola Bay seafood industry.

In fact, the Corps' current authorization does not recognize the seafood industry of Apalachicola Bay as an authorized project

purpose of Lake Lanier. I plan to introduce legislation to change that.

The City of Atlanta is growing at a phenomenal rate, producing a healthy local economy and jobs for its people. By contrast, Apalachicola Bay area has suffered the effects of two hurricanes in the past five years which severely damaged its valuable oysterbeds, and near drought conditions. We don't believe the burden of Atlanta's growth should be placed on the shoulders of the people of North Florida and Alabama.

Water wars are new to the Southeast. While our western neighbors have been struggling to meet water needs of their citizens, we have in the past had ample water to accommodate the many communities and industries heavily dependent on Lake Lanier. But that no longer appears to be the case.

The Apalachicola-Chattahoochee-Flint River System is just that -- a system -- and to manage it other than as a basin-wide system is simply unacceptable. Any decision that this Congress eventually makes must take into account the needs of the oystermen and fishermen of Apalachicola, the hydropower electricity customers in Alabama and the residents of Atlanta.

It is vital that we give careful consideration to the environmental impacts any reallocation will bring. We in Florida are familiar with the long-term impacts of bad environmental

decisions.

Just this week, the House passed the Water Resources Development Act, a bill which this very subcommittee drafted. Within that bill was language I developed to help facilitate the restoration of the Kissimmee River.

The channelization of the Kissimmee River was an environmental disaster of monumental proportions. It contributed greatly to the pollution of Lake Okeechobee and the degradation of our once thriving Everglades. We will correct the problem, but it will probably cost about $300 million.

Clearly, protection is cheaper than restoration. The Apalachicola River, which was designated as an Outstanding Florida Water in 1982, has the greatest number of endangered plant species of any area in Florida. It would be foolish of us to assume that reallocating 529 million gallons of water a day, only a portion of which will be returned as treated water, will have only a minor impact.

The decisions we make now on the reallocation of Lake Sidney Lanier are irreversible and will have repercussions well into the next century. Any reallocation proposal must include a full environmental impact study and must balance the needs of all who depend on the ACF system.

Mr. Chairman, I appreciate the subcommittee's interest in this

issue and its sensitivity to the people of Florida and Alabama, as evidenced by this hearing.

Mr. NOWAK. We would like to invite now Tom Gallagher, who is the State Treasurer, State of Florida, to come forward, along with Representative Al Lawson, who is a member of the State House of Representatives, State of Florida.

And Mr. Gallagher, if you will—I will remind all of the witnesses that will come forward today, that your full statement will be incorporated in the record to give us the opportunity to get as many people as we possibly can before us for a short dialogue.

Mr. Gallagher.

TESTIMONY OF TOM GALLAGHER, TREASURER, STATE OF FLORIDA, AND REPRESENTATIVE ALFRED LAWSON, JR., FLORIDA HOUSE OF REPRESENTATIVES

Mr. GALLAGHER. Mr. Chairman and members of the Committee, good morning. I am Tom Gallagher, Treasurer and Insurance Commissioner for the State of Florida and a member of Florida's Cabinet. I would like to welcome all of you to Tallahassee and to thank you for taking the time to be here. This is a very important issue for us.

First, I would like to say that I understand the need for additional drinking water for Atlanta's residents. Rapid growth, of course, has caused water problems for us here in Florida, too. Supplying increasing demands for drinking water is one of the most difficult tasks we are facing today. I do not under-estimate the difficulty of your task.

We need to keep in mind, however, that any decision to withdraw large amounts of additional water from Lake Lanier does not just affect Georgia residents. Such a decision has the potential for severe repercussions that will affect millions of Floridians as well. This is clearly not a local decision. Your being here today indicates that you have recognized that fact.

It may seem odd to those of you from out of state for Florida's Treasurer to be concerned about an environmental issue. As a member of the Florida Cabinet, however, I have the responsibility of voting on numerous environmental issues—everything from land and water use issues to protection of endangered species, review of underground pollutant storage tank rules and approval of power plant sites.

One issue that has been of particular concern to me as a cabinet member is the protection of one of our state's more valuable and valued important resources—Apalachicola Bay.

Apalachicola Bay is important to this state and the entire Gulf Coast both economically and environmentally. The seafood produced by this bay is sold all over the United States and internationally. You will hear a lot of figures tossed around today. Every time an issue involving Apalachicola Bay comes before the Cabinet, we are bombarded with pleas from the people who make their living from the Bay. All of them come armed with statistics about the importance of this estuary.

I am told that in the early 1980s, as much as 90 percent of the oysters harvested in Florida came from the Bay. I have heard a dockside value figure of $14 million in annual seafood landings

from the Bay. These are not trivial figures. The seafood industry is the most important employer in coastal northwest Florida.

In addition to Apalachicola Bay, acts—this Bay acts as an aquatic nursery for the entire Gulf region. This estuary would not exist without the abundant supply of freshwater from the Apalachicola River.

As you can see here, gentlemen, this is basically what we are talking about. Starting at Lake Lanier, flowing on down through into—from Georgia into Florida and ending up in this area you see down here, which is the Gulf of Mexico. This Apalachicola Bay area—this small blue area inside these green islands is where, in fact, all of the seafood and where all of the small fish that basically support the entire Bay come from.

I am sure that there are scientists here today that will provide you with the information you need to demonstrate the importance of that freshwater flow. But the people who live and work in this area already know that their way of life depends on maintaining and protecting the delicate Apalachicola Bay ecosystem. They know that any activity which affects the Bay clearly affects their lives and the lives of the people who work in all aspects of the seafood industry.

The State of Florida has spent millions of dollars protecting the Apalachicola Bay area. The importance of this area has been recognized through designation of the Bay as an aquatic preserve and as an outstanding Florida water, designations that afford the Bay extra protection in many ways. In addition, the Florida legislature has designed Franklin County an area of critical state concern.

As a result of this critical state concern designation, the Governor and Cabinet find ourselves dealing with a lot of issues involving Franklin County and the Bay. Issues such as the placement of a parking lot, the approval of minor zoning changes or the use of septic tanks. These issues may seem rather trivial at first.

I know sometimes the individuals involved must wonder what possible interest the Governor and the Cabinet could have in what type of septic tank they install. But the fact that these seemingly trivial decisions are considered Cabinet level issues demonstrates the importance that Florida places on Apalachicola Bay. It is absolutely essential that we protect it.

I realize that you are faced with a difficult decision. Any decision that requires a delicate balancing of different interests is necessarily a difficult one. Let me tell you, we have to face a lot of those decisions ourselves. And some of the toughest decisions, the Governor and Cabinet have to make and have to face involve Apalachicola Bay.

Some of those decisions have involved development near the Bay. Development could bring a much-needed economic boost to a region badly in need of jobs. Let us face it, Franklin County has had a tough time economically during the past few years. It has been hit hard by two hurricanes, and it has suffered. It would be so easy to approve a project that could lighten the economic burden for that county.

But no matter how well designated a project—designed a project is, no matter how sophisticated a state-of-art storm water control system is, no matter how well-intentioned the developers are, sys-

tems fail. Projections do not pan out. Managers come and go. Even the remote possibility of contamination to the Apalachicola Bay is unacceptable. We have to balance the needs; but we also have to look at the big picture.

That is all I am asking you to do. Please look at the big picture. We are talking about the future of the seafood industry in Florida and along the entire Gulf Coast. And I ask you to give very careful consideration to all potential effects of any decision you make.

And I thank you very much for the opportunity to be here today. I appreciate you being here, and I will be glad to answer any questions you may have.

Mr. NOWAK. Thank you very much, Mr. Gallagher. We will have Mr. Lawson's testimony, then perhaps, have some opportunity for some dialogue.

Mr. LAWSON.

[The prepared statement of Mr. Gallagher appears on p. 89.]

Mr. LAWSON. Thank you very much, Mr. Chairman, and Congressman. I would like to thank you for the opportunity to speak to you today. I am Al Lawson, Representative of the Ninth District in the Florida House of Representatives and Chairman of the House Natural Resources Committee.

I have come to express my concern for the future of Apalachicola Bay. Perhaps the most crucial factor affecting the health and productivity of the Bay is the flow of freshwater into it. Obviously, if there was no freshwater, the Bay would not exist as an estuary. If the flow of freshwater continues to be reduced by diversions of water from the Apalachicola-Chattahoochee-Flint River system, the estuary may be replaced by some alternative ecosystem. This would be devastating for a number of reasons, which you are already aware.

Historically, the Apalachicola Bay has been one of the state's major seafood producing areas. I have spent a great deal of time in the Apalachicola Bay since I have been in the state legislature and have come to understand how it fuels the local and the state economies and defines the local culture. Over 85 percent of Franklin County residents make their living from the Bay. The dockside value of marine harvests from the Bay has averaged over $12 million annually through 1985, contributing an estimated $30 million to the local economy and $65 million to the state economy yearly.

The Bay is one of the most productive in the Northern Hemisphere, both for seafood generally and oysters in particular. It is designated as a national estuary sanctuary, a Florida aquatic preserve and an outstanding Florida water, a Florida Class II shellfish harvesting area and an area of state critical concern. The United Nations designated it as an international biosphere preserve. These designations are intended to protect the water quality and productivity of this valuable natural resource.

The Apalachicola Bay normally has just the right salinity for optimum oyster production and to serve as habitat for numerous other seafood species. But the Bay experienced extended drought conditions from 1986 through 1988, causing increased salinity in the Bay, which attracts oyster predators. These conditions have been made worse by the decrease in flow into the Bay from the Apalachicola River due to the increased demand of freshwater by

Georgia and Alabama placed on the Apalachicola-Chattahoochee-Flint River system.

In managing the river system, the Army Corps of Engineers has not addressed the freshwater needs of the Apalachicola Bay because the corps has not considered the Bay to be an official user of freshwater. The situation seems ludicrous since the Bay would not exist as an estuary without the flow of water from the river system.

There is currently not enough information on how much freshwater the Bay needs to maintain a productive estuary and a major oyster resource. An estimation of the freshwater needs of the Bay was to be included in the Army Corps of Engineers study of the Apalachicola Basin. However, the study has been stalled for some time, and the corps has indicated it no longer has the funding to complete it. Until a freshwater needs assessment is done, Florida cannot adequately represent its interests in the allocation of water in the river system.

The corps' proposed contract with Atlanta to reallocate water from the Chattahoochee River is a symptom of a much larger problem that has existed for many years. That is that the corps' decision in managing the river system has not been based on a comprehensive assessment of the water needs in the system. We can no longer accept allocation decisions made without regard to their impact on the entire system.

The Apalachicola Bay is one of the most unique and economically valuable natural resources Florida has. The local economy depends on it, and the state economy greatly benefits from it. Over 95 percent of the seafood species in the Gulf of Mexico depends on the estuary at some time in their life cycle. The loss of the Bay through allocation of its ecosystem would have devastating impacts on Florida and on the Gulf Coast in general. For that reason I have discussed, the Apalachicola Bay should be designated by the Corps as an official user of freshwater.

I urge Congress to require the Corps to work with Florida in conducting a freshwater needs study of the Bay, to designate the Bay as an official user of freshwater and to delay any reallocation plans until the Bay's needs are established.

I want to thank you for taking the time to listen to my remarks. And, I hope you will take them to heart.

[The prepared statement of Mr. Lawson appears on p. 108.]

Mr. NOWAK. Thank you very much, Mr. Lawson. We not only will take it to heart, but it has been taken to court and we will have an opportunity to express, I am sure, in much greater detail the listing in a court proceeding of those type of effects that Florida does not believe were taken into that comprehensive type of analysis that you mentioned.

In looking at yesterday's testimony, we had the Attorney General from Alabama, and I requested all of the pleadings that had been entered. And of course, that proceeding has been stayed now by agreement of Alabama, Georgia and Florida. And all of the intervenors will also be stayed, pending a negotiation toward some relatively satisfactory solution. And we will be following that process and the procedures that will be moving forward with the pleadings that are filed, and we have asked to be kept abreast of the ne-

gotiations as that time table goes ahead. And one of the things that we were looking at when we, of course, had scheduled this hearing, there was not a joinder in that lawsuit. Now that there is, we will have to look at what transpires over the next several months. Hopefully some conclusions—your interest in the State of Florida—can be taken into consideration and they may be able to find a way to satisfy either through a further study or through expanded studies analysis of what has already been put forward.

But you make the correct statement that the impact down here is—relating to the Bay—is not only—even if the quantity of the water was kept at the old level without the reallocation, you would still have questions about the quality of the water that goes into the Bay. And it is my understanding also that another consideration may be the kind of—the timing that occurs for the increase and flows of the allocations up in Buford that will affect a different type of flow—at least the timing of that flow into your system.

And I was wondering if during your work on the Subcommittee on Natural Resources that timing effect was ever discussed in any detail.

Mr. LAWSON. Well, on the—with the—on the Committee of Natural Resources, the timing element was not really discussed because I think what has happened is, when we left session, it was shortly afterwards—even though there had been some rumors of it that Atlanta would be making a proposal to the corps for the reallocation of water. So as a result, we adjourned out of session without having the opportunity for the Natural Resources Committee to really address the issue.

Mr. NOWAK. If you do—we would appreciate it if you do have hearings on that and the other impacts on the estuary with the—as this negotiated settlement is proceeding and you develop other material. And I am going to ask some of the witnesses to look at those overall impacts and see what—over and above—the impact would be on the spawning of fish and so forth in that area. So perhaps that concern of the oysters experience that you had, you know, could be also joined with the broader impact of spawning in that total estuary which has such an impact in other areas and the whole commercial fishing, as well as the sport fishing industry. And I am sure you are familiar with that. They do some of that in Florida, too, I understand.

Let me turn to Arlan Stangeland, our minority leader.

Mr. STANGELAND. Thank you, Mr. Chairman.

Mr. Gallagher and Mr. Lawson, has the Florida DNR made any study at all as to the minimum flows needed to maintain the Apalachicola Bay?

Mr. GALLAGHER. Congressman, I am not sure of any actual studies of the minimum amount of water. Although the Department of Natural Resources is a Cabinet agency—the Cabinet of Florida sits as the agency head, and that is one of the five agencies that we do oversee——

Mr. STANGELAND. Let me ask you this. Would you have the capability to make some kind of determination of the need?

Mr. GALLAGHER. I would hope that we would, and I——

VOICE. We have someone here from Natural Resources.

Mr. GALLAGHER. There she is. Do you know if we have a study?

VOICE. We do not have a study, but we do have—I know the water management district have done some initial studies, and they are working on them right now.

Mr. GALLAGHER. We have water management districts throughout Florida that do manage water in those districts. And from what I hear, they are in the process, I guess, of trying to measure what flows are necessary to keep that Bay healthy.

Mr. STANGELAND. How old is the seafood industry in the Apalachicola Bay?

Mr. LAWSON. I have never been asked that question before. I would think that—you know, there are several people here that are from Apalachicola. I would estimate that the seafood industry is almost as old as Apalachicola. But I would say that—I could probably ask Woody Miley, that works out there for——

Mr. STANGELAND. That is not required. I guess the point——

Mr. GALLAGHER. I think the Indians took some oysters out of there, to tell you the truth. I am not sure it was just us. [Laughter.]

Mr. STANGELAND. Well, you know, I have concern and sympathy for you, and I think it is important that we attempt to make a determination as to what the minimum flow can be and to determine or ascertain or make certain that that minimum flow has the freshwater quality that is conducive to maintaining that estuary. But I would presume that—but, coming from Minnesota, I do not know your weather patterns—I would presume that prior to Buford Dam and Lake Lanier, there was a great variation in the flows.

So it is something that we want to know, so that when we do it, we do it right. We do not want to do something that will—that will be punitive or damaging to the Apalachicola Bay. And yet, we would like to meet the needs of the upstream people as well. So there are some things there that—and I think the corps will get these questions as well, gentlemen. It may well be that the Florida Department of Natural Resources, in conjunction with the corps, can determine, the flow level needed and together to develop a workable solution.

Mr. NOWAK. Thank you.

Congressman Grant.

Mr. GRANT. I do not have any questions, Mr. Chairman.

Mr. NOWAK. I just wanted to make one more remark. We have—we have the pleadings now from, I think, Georgia and Alabama. If you could, Mr. Gallagher, get the—for us, the pleadings that were entered on behalf of the State of Florida through, I assume, the Attorney General's Office——

Mr. GALLAGHER. We can do that.

Mr. NOWAK. [continuing]. We will also make that part of the record. And I want to thank you both for taking the time and preparing your statements.

Mr. GALLAGHER. Thank you, Mr. Chairman.

Mr. LAWSON. Thank you.

Mr. GRANT. I would make a comment, though, Mr. Chairman. Both these men understand full well that the loss of oyster production in Apalachicola Bay would have a serious and long-range effect on the political lives of those that serve in the State of Florida. [Laughter.]

Mr. NOWAK. Well it may, and I was just informed that the first people that took the oysters out of bay were from Miami. [Laughter.]

Let me now bring up the corps and our first panel. From the Army Corps of Engineers, Col. Michael F. Thuss, who is a District Engineer from the Mobile District, and from the Fish and Wildlife Service, Jay Troxel, who is a Supervisory Fish and Wildlife Biologist. And gentlemen, welcome before the Committee. And we will proceed as we did with the first witnesses.

TESTIMONY OF COL. MICHAEL F. THUSS, DISTRICT ENGINEER, MOBILE DISTRICT, U.S. ARMY CORPS OF ENGINEERS, ACCOMPANIED BY SKEETER McCLURE, CHIEF OF PLANNING AND JAY TROXEL, FISH AND WILDLIFE SERVICE, SUPERVISORY FISH AND WILDLIFE BIOLOGIST

Colonel THUSS. Good morning, Mr. Chairman, and members of the Committee. I have Mr. Skeeter McClure, my Chief of Planning, here with me. Mr. Chairman, I request that you incorporate my written statements for the record.

Mr. NOWAK. Without objection, so ordered.

Colonel THUSS. And with your permission, I will summarize my statement here and bring you up to date on our planning.

Mr. NOWAK. Go right ahead.

Colonel THUSS. The litigation between Alabama and the corps has been put in a stayed condition, based on a court-approved agreement between Alabama and the corps. The purpose of the agreement is to allow for an opportunity for us to negotiate an acceptable solution. Negotiations have been productive. We are dealing with complex issues, and there is a diversity of interests involved. Alabama, Florida and Georgia are negotiating with us in good faith, and we are very optimistic.

We have proposed to use a comprehensive study process with a planning horizon of 50 years to address the complex water resource issues found in the Apalachicola-Chattahoochee-Flint Basin.

We are currently in the process of developing a memorandum of understanding between the States of Alabama, Florida and Georgia and a plan of study for the comprehensive study, and we are also doing that with the States of Alabama, Florida and Georgia. Once signed—once the memorandum of agreement is signed, we expect to conduct a four-year program with full public and institutional participation. One of the products we expect is a mechanism for resolution of long-term water resources issues among the states. Sir, that concludes my summary, and we would like to thank you for allowing us to participate and I would be happy to answer any of your questions.

Mr. NOWAK. Thank you very much, Colonel, for your very comprehensive and complete written testimony, which of course, will be incorporated totally in the record.

We will now turn to Jay Troxel.

[The prepared statement of Colonel Thuss appears on p. 141.]

Mr. TROXEL. Mr. Chairman, my name is William J. Troxel, and I am the Assistant Project Leader of the Panama City, Florida Field Office of the U.S. Fish and Wildlife Service. My office is responsible

for activities related to fish and wildlife resources throughout the Apalachicola-Chattahoochee-Flint River Basin, and I appreciate the opportunity to discuss the proposed water reallocation from Lake Sidney Lanier.

I would like to address three main issues: One, the cumulative water quality impacts on fish and wildlife resources from the water reallocation; service activities in evaluating the effects and possible measures to prevent any adverse impacts; and our Planning Aid Report of recommendations.

The Mobile District of the U.S. Army corps of Engineers has prepared the Lake Lanier Water Control Plan and Post-Authorization Change Report. The data contained in this report suggest minimum impacts to fish and wildlife resources through implementation of the reallocation proposal. However, we believe that the cumulative effects on fish and wildlife resources cannot be adequately determined since the corps report dealt only with federal water reallocations. Examples of information needs are included.

One, the effects of water level and water quality changes throughout the basin on fish spawning, waterfowl and water bird habitats and populations.

Two, the effects of this proposal and the City of Atlanta's changed water use patterns on the quantity, quality and timing of flow below Atlanta, as well as impacts on the Chattahoochee River and reservoirs.

And three, the cumulative effects of the present proposal in conjunction with Atlanta's water use after 2010, present and future water use by other communities in the basin and present and future ground water withdrawals for irrigation.

Since the Post-Authorization Change Report did not address comprehensive cumulative impacts, the report's findings of minimum impacts may be questionable. The service, therefore, is concerned about the cumulative impacts that such a water allocation scenario would have on resources in the ACF basin.

Since service activities directly related to the water reallocation plan began in the early 1980s with coordination efforts on the Atlanta Metro Study, the current water allocation plan is a product of the original study.

The service has not been a participant in the direct development of the Reallocation Plan and the Water Control Plan, but has prepared a Planning Aid Report on the proposal under the Fish and Wildlife Coordination Act. Our report discussed the fish and wildlife resources of the basin with emphasis on anadromous fish species. We also expressed a concern for the inadequacy of data on water quality, quantity and timing of releases below Lake Lanier due to drainage water use and present and future development patterns.

Our report was submitted to the Mobile District in December of 1989. To date, the service has not been contracted by the corps regarding any additional activities planned for the ACF Basin.

As noted previously, the service reviewed the available data and concluded that the proposed Lake Lanier Post-Authorization Change Report does not quantify current or cumulative impacts to fish and wildlife or their habitats.

Based on our involvement in the planning for this project, the service hopes that the following recommendations, which were included in our Planning Aid Report, will be considered in planning for water reallocation in the Basin:

One, since the product—excuse me, since the project may impact salinity levels in the Apalachicola estuary, it may be necessary to amend the project purpose to incorporate providing freshwater flow into the Apalachicola estuary in order to maintain seafood production.

Two, a basin-wide ACF water use plan and water budget should be developed to address future long-term needs.

Three, a tri-state compact capable of developing and implementing a basin-wide plan should be established.

Four, since the potential cumulative impacts of this project have not been fully assessed, consideration should be given to supplemental NEPA assessments to assess direct and indirect effects on fish and wildlife resources, as well as mitigation actions developed by the Corps of Engineers.

Mr. Chairman, the Service is concerned that the cumulative impacts from the proposed reallocation be assessed in order to avoid negative environmental impact to the aquatic resources throughout the river basin system. We would, therefore, hope that these recommendations be considered.

Mr. Chairman, thank you for the opportunity to testify before the Subcommittee. I will be happy to respond to questions.

[The prepared statement of Mr. Troxel appears on p. 153.]

Mr. NOWAK. Thank you very much.

You have outlined the opportunities that you may have, and I was wondering, Colonel, if you could respond as you go through your negotiation now with the three states—will the recommendations made by Mr. Troxel be considered at that point in the process?

Colonel THUSS. Yes, sir. The current plan is to publish a plan of study for the comprehensive study in the near future. And of course, that plan of study would address the key issues that we expect to look at and the detail that we expect to look at those issues. That would be certainly circulated to all of the interested federal, state and local agencies for their review and comment.

Mr. NOWAK. Mr. Troxel, do you believe at this time that you have got enough information to believe that a full environmental impact statement would be necessary in this matter?

Mr. TROXEL. Yes sir, we do believe that. A lot of the uses in the Basin really have not been addressed as yet. And they all incorporate on the water use throughout the Basin.

Mr. NOWAK. You mentioned fish and, of course, the species that return in the freshwater—to the freshwater, after spending some time out in the ocean, to spawn. When those species come back, how big of a—either in the Bay itself—is it brack water?

Mr. TROXEL. Brackish water?

Mr. NOWAK. Brackish water. As those—the spawning cycle returns, is there a huge difference as to the amount of fish that go up into the freshwater, or that just use the Bay's brackish water?

Mr. TROXEL. At the present time, we—the service does not have data about impacts on the estuary. I am assuming the State may have answers to some of those questions.

Mr. NOWAK. Would the spawning be a large impact area that has not been perhaps fully looked at in this estuary?

Mr. TROXEL. I probably could not answer that, sir. But, I could probably say drought conditions throughout the Basin over the past few years have probably impacted spawning and reproduction in the estuary.

Mr. NOWAK. The timing of the flow was mentioned as something that perhaps should be looked at and I am wondering when you look at timing and you look at the quality question, the drought that started, I believe, here in about 1986, or at least was centered in 1986; the impact of adequate or average, I would say rainfall, would seem to be a much larger factor in the feeding of this system into—you know, bringing that freshwater down. If that—if you had an above-average season, I would assume then that you are going to get an above-average flow through the system into the Bay, is that correct?

Mr. TROXEL. I would assume so. The timing of flow is necessary, to flush the swamps and forests of the material into the Bay system so they could be utilized by the estuary species.

Mr. NOWAK. We have not devised that system yet that, you know, we call on rain when we want it to come.

Mr. TROXEL. That is correct, sir.

Mr. NOWAK. Hopefully, you know, that will be part of our next hearing. But, let me turn now to Arlan Stangeland.

Mr. STANGELAND. Hopefully, we do not devise that system because we could sure find a way to screw it up. [Laughter.]

Mr. STANGELAND. Mr. Chairman—thank you, Mr. Chairman.

Colonel Thuss, what would be the cost of a study to determine the minimum flows necessary to maintain the quality of the Apalachicola estuary?

Colonel THUSS. Sir, I would have to provide you with that for the record.

Mr. STANGELAND. Could you do that?

Colonel THUSS. Yes, sir. We would like to coordinate that study and that cost with the State of Florida. In other words, their——

Mr. STANGELAND. It would seem to me that there is going to be a tremendous amount of bad will and hard feelings and difficulty in negotiating until there is some assurance to the people in the downstream area that the impacts of reallocation are not going to adversely affect them. And, you know, people's fears, however unfounded, become reality. Perception becomes reality. So, I think that is something we have to do.

Mr. Troxel, Fish & Wildlife has no capability to determine what the minimum flow might be?

Mr. TROXEL. No sir, we do not. I would suggest USGS would be a capable entity.

Mr. STANGELAND. I presume you are estimating that there will be some adverse impacts on the Apalachicola Bay during these drought years. But I would also presume that if you look at history, you would find times when there was less than an adequate flow. Now that the river is controlled, there is a constant flow because of

the reservoirs that hold the water back. And of course, the people are concerned that too much water will be drawn. I gather from the testimony yesterday and the testimony that we are probably going to hear today, there may not be great concern up to 2010; however, after 2010 several questions arise, specifically, where is the projected growth going to go and how much is the projected use going to be? And that has to be answered as well. It would be foolhardy to try to get an agreement that takes it to 2010 but after 2010, all of a sudden, you find the Apalachicola where it exits the continent in the Gulf, there is no water. You cannot have that. I thank you, gentlemen.

Mr. NOWAK. Congressman Grant.

Mr. GRANT. Thank you, Mr. Chairman.

Colonel, in the report that was submitted to the Congress, what were the project purposes that the corps used for the system—primary purposes?

Colonel THUSS. Well, they vary, sir, with each facility that was built along the system. Specifically, perhaps Lake Lanier—Buford Dam is the one that is in question. That is the one we need to address. It was for navigation and hydropower. There was a mention of water supply in there and recreation and flood control.

Mr. GRANT. Recreation was a consideration?

Colonel THUSS. Not in the original—in the original——

Mr. GRANT. But in the post-authorization?

Colonel THUSS. Yes, sir.

Mr. GRANT. Did you consider the impact on the lower part of the Basin at all in that—in those decisions?

Colonel THUSS. Well, the decision on the post-authorization change has not been made yet, and—but yes, they have been considered, and they are one of the things that we are in litigation with Alabama now.

Mr. GRANT. In testimony, one of the previous witnesses said that the corps had not considered the Bay to be an official user of freshwater, is that so?

Colonel THUSS. No sir, that is not correct. It is partially correct; it is partially incorrect, as it always is, right? [Laughter.]

Mr. GRANT. You would do good in this job. [Laughter.]

Colonel THUSS. It is not considered a project purpose. Congress did not identify water supply for Apalachicola Bay as a project purpose. I think that is the authority that I have to act on.

Mr. GRANT. I want to make sure I understand that now. The corps did not have the authority to consider the impact upon the Bay, is that what you are saying?

Colonel THUSS. No. No, sir. I think what—I do not want to put words in other people's mouths, but I think what they are asking is whether or not the flow of water into Apalachicola Bay can be made a project purpose, which would then raise its priority for decision making, which would make a decision between water uses. When we manage the water that goes through that system, where does water flow into Apalachicola Bay fall when you consider it, say, for example, against municipal water use.

Mr. GRANT. That is exactly what I want to find out. But that is not what the corps has done in the past, is what I am trying to determine and make a part of the record. Is that right?

Mr. STANGELAND. Might I intervene, if I might? The project purpose never ever included the water discharging into Apalachicola Bay as a part of a project purpose.

Colonel THUSS. That is correct.

Mr. STANGELAND. And only the Congress can change a project purpose, so we may have to come up with an amendment.

Mr. GRANT. Right.

But you said that you considered recreation without Congressional authority, did not you?

Colonel THUSS. No. No, sir.

Mr. MCCLURE. It is the purpose under the generic authorization of Congress to consider it for existing water resources projects. They are two statutes that allow us to include recreation as a purpose in projects that—some projects are specifically authorized for recreation as part of the original authorization. Others, it is an included purpose in a generic fashion.

Mr. NOWAK. And you may also have additional statutory authority for project purposes after the original purposes were directed.

Colonel THUSS. That is correct.

Mr. MCCLURE. That's true.

Mr. NOWAK. Let me try to clarify this one point. As you go through the study of the system and the impacts of the system, you do look at the total system though, and you do look at impacts into the Bay, as well as all the other project purposes that you are looking for as to how they impact on those purposes, is that not correct?

Colonel THUSS. Yes, sir.

Mr. GRANT. Well, that is—my whole point, of course, is that we want to have—in fact, this member thinks that it is extremely short-sighted to consider recreation on the upper part of the Basin as a project purpose and not consider the environmental and economic considerations on the lower part of the Basin, and that is what we are trying to establish. But I want to say, too, that the corps has been a great friend to this whole area. We thank you for what you have done.

Mr. STANGELAND. If you will yield just briefly? Would we be required to authorize the direct authorization for the study of the minimum flows necessary to maintain the Apalachicola Basin, or could you do that without our direct authorization?

Colonel THUSS. Sir, we have authority to conduct the comprehensive study, and that would be included—that would certainly be included and the funding for that is being arranged now.

Mr. NOWAK. And under that authorization or that study that you are going through, and also, of course, the negotiation that you will be working through, you could incorporate a broader study of these impacts down here as recommended by Mr. Troxel, is not that correct, Colonel?

Colonel THUSS. Yes sir, we could. And the only thing that would have to be worked out would be the level of detail of the study.

Mr. STANGELAND. Let me—may I ask one more question of Mr. Troxel.

Mr. TROXEL. Yes, sir.

Mr. STANGELAND. The current water quality of the discharge of the Apalachicola, is that satisfactory? Is it—are there variances at

times when it exceeds an acceptable limit of pollutants, or what is the condition of the discharge?

Mr. TROXEL. I probably—I do not have any information regarding the quality of the discharge at Apalachicola Bay myself. I am much more familiar with water quality parameters in the upper basin, those—West Point, primarily, because that is where we have had water quality problems for numerous years.

Mr. STANGELAND. You might want to respond to that in writing to let us know. That is something we have to be concerned about to maintain that water quality to be sure that it is not being degraded.

Mr. TROXEL. Yes, sir.

Mr. STANGELAND. Thank you.

Mr. NOWAK. Well, let me thank the panel. Once again, your written testimony will be a great help. And as we go through, cross-referencing other witness' statements, we may want to get back to you and we are going to leave the record open for some additional questions. And hopefully, we will send those to you as soon as we can develop them. Thank you again, Colonel, for your——

Mr. GRANT. Mr. Chairman, could I ask one more question before they go——

Mr. NOWAK. Yes.

Mr. GRANT [continuing]. Of Mr. Troxel? Are you prepared or can you or anyone in your office give us a statement on the quality of the water that will be discharged, that the City of Atlanta is proposing to discharge back into the system?

Mr. TROXEL. I do not have that data at hand. But currently, Fish and Wildlife Service is a member of a task force being chaired by Congressman Ray, Third District of Georgia. They are working on a EPA Clean Lakes Program for West Point. Data is available, but I do not have that at the present time.

Mr. GRANT. Would you supply that to us?

Mr. TROXEL. I could certainly get that for you, sir.

Mr. GRANT. Thank you.

Mr. NOWAK. Thank you very much and thank all the panelists. We will get back to you when we receive other information.

Our next panel will consist—we are going to break up the panels because of the limitations of seating. But, we want to bring forward John Costigan, who is the Chief Environmental Litigation Officer for the State of Florida; David Maloney, who is the Office—from the Office of the Governor of the State of Florida; and Monica Lemieux, who is an aide to Senator Bruner.

Who would like to go first?

Mr. MALONEY. I would like to go first.

TESTIMONY OF DAVID MALONEY, OFFICE OF THE GOVERNOR, STATE OF FLORIDA; JOHN COSTIGAN, CHIEF ENVIRONMENTAL LITIGATION OFFICER, STATE OF FLORIDA; MONICA LEMIEUX, AIDE TO SENATOR BRUNER

Mr. MALONEY. Members of the Subcommittee. My name is David Maloney. I am an attorney in the Governor's Office, and I am here in place of Estus Whitfield this morning, who was unable to be here to represent Governor Bob Martinez.

First of all, I want to thank each of you—each member of the Subcommittee—for holding this field hearing and for coming to Tallahassee. And then, I want to thank Chairman Nowak and Congressman Stangeland for coming to the Second Congressional District of Florida, Congressman Bill Grant's district to hold this hearing in Tallahassee. These words of thanks are not just a perfunctory opening to my statement. Florida appreciates your attention to this matter, and we appreciate your travel to Florida—to our territory, so to speak. And we appreciate it deeply because of the geography of our situation.

As you know, the Apalachicola Bay, an incredibly biologically rich and ecologically diverse outstanding Florida water, is at the end of the line for the ACF river system and drainage basin. Nearly 90 percent of that basin is north of the state line in Alabama and Georgia. Rainfall patterns in Alabama and Georgia and water management practices by the Army Corps of Engineers have much more impact on the flow of freshwater into the Bay from the Apalachicola River than the rainfall we receive in Florida and how Florida manages the river and the bay.

So when we say we are honored and feel respected by the Subcommittee's holding of the hearing in Tallahassee and by being willing to listen to our concerns, we mean it. Florida is in a vulnerable position, at the mercy of rainfall in Georgia and Alabama and the water management practices of the Corps of Engineers along the ACF river system basin, and we need your help.

I listened with interest with Treasurer Gallagher's remarks this morning talking about the Governor and Cabinet sitting as an agency with authority to review such minor matters as whether a parking lot should be near the Bay. Recently, there was a very heated environmental issue involving a development which had a golf course and the issue came down to the placement of a few holes of the course near the Bay. The developer wanted them near the Bay because the developer wanted for marketing purposes to have a scenic view of the Bay. The Department of Community Affairs for the state, from a land planning perspective, opposed the golf course being there and this issue of seven golf course holes made the editorial pages of The Miami Herald, The St. Pete Times and papers—major papers all over the state because what happens to Apalachicola Bay is just not a matter of local interest; it is a matter of interest to the whole state of Florida.

You will hear this morning from a broad range of groups—from the seafood industry because the Bay is a source of shrimp, blue crab, finfish and oysters. And the economy of Franklin County is directly dependent on the seafood industry. The Bay is Florida's oyster factory. Prior to the loss of freshwater flow to the Bay caused by the near drought conditions in the late 1980s and hurricanes of 1985, the Bay produced 90 percent of the state's oysters and 10 percent of the nation's. And Apalachicola Bay oysters have earned and enjoyed a reputation of being the nation's best.

You will hear from state agencies charged with preserving the state's natural resources and protecting the environment. Apalachicola Bay and the river are one of three areas of critical state concern designated by the legislature. One of the other areas, the Florida Keys, was recently declared off limits to offshore oil drill-

ing by President Bush in recognition of its sensitive and precious environment. It is this kind of federal attention—careful and considerate of Florida's irreplaceable natural resources—that we in Florida seek and appreciate.

You will hear from various environmental groups whose aim is to protect not only the Bay and the river, but the wildlife habitat in the flood plain, the bottom land, hardwood trees, the tupelo, the cypress, the ash, the oak, the endangered plant species, amphibians and reptiles whose species density is greater in this area than in any other area in the continent north of Mexico. This ecological diversity is the result of floral and faunal influence received by the basin from five distinct geophysical areas: Peninsula Florida, the Gulf Coastal Plain, the Atlantic Plain, the Piedmont and the Appalachian Mountains. This influence is carried down river by freshwater flowing into Apalachicola Bay. The bottom line is that this is a system. It must be approached as a system by Congress. And it is a system that is full of environmental superlatives.

Listen to this testimony this morning from these different perspectives, and you will hear at least one thing in common. The seafood industry, the wildlife habitat, the Apalachicola River, the Bay, the State of Florida needs your help. We need your help in at least three distinct ways.

First, we need you to support and work for and to get congressional funding for a comprehensive study of the Apalachicola-Chattahoochee-Flint River Basin as generally described in the conceptual plan that was presented by the corps to Congressman Bevill in February of this year. As you know, Florida had moved to intervene in the suit brought by Alabama against the corps to enjoin the corps from entering water allocations towards the flood contracts with the state of Georgia, contracts which threaten the flow of water to the Apalachicola River and Bay. The Attorney General of Florida, represented this morning by John Costigan, will fill you in on the details of the status of the lawsuit. In negotiations with Alabama, Georgia and the corps to amicably resolve the suit, the corps has repeatedly stated that it supports a comprehensive study, but has consistently conditioned its support on funding from Congress.

It was lack of congressional funding which left unaccomplished several important goals of the 1983 Memorandum of Agreement between the states and the corps. So, the corps is well aware that whatever it agrees to in concert with Alabama, Georgia and Florida is dependent on the adequacy of federal funding. Florida needs a comprehensive study of the Basin, and we need your help in seeing that it is adequately funded.

Second, we need your assistance in ensuring that the historical flow of high quality freshwater across the state line into Florida and out to the Bay continues, pending the results of the study. In this regard, the corps must be vigilant to manage the reservoirs and other parts of the water management system in the ACF rivers on a basin-wide basis—that is, a system-wide basis. Development by our neighbors to the north cannot be allowed to take precedence over the environmental needs of Florida.

Our environmental needs affect the economy of Franklin County and the irreplaceable natural resources of Florida. These needs are

very serious and are long-term. If the ecology of the Bay and its biological productivity is destroyed, the Bay will not be back. The rivers must be managed by the corps to ensure historical flow of quality freshwater until we know from the study exactly how much minimum flow is necessary to support the Bay. It should be recognized that management by the corps will require difficult choices and may require alteration of the corps' current management scheme of the system.

Finally, we need your help in obtaining federal legislation and supporting Congressman Grant's bill when introduced to make maintenance and protection of the river and the bay and the guarantees of adequate freshwater flow to the Apalachicola Bay authorized project purposes under the corps' jurisdiction.

I think you will hear many of the comments I have had to say today echoed by the other witnesses. The State of Florida really appreciates your being here and your willingness to listen to us. We ask your help. We are counting on you, and we thank you very much.

Mr. NOWAK. Thank you very much for your excellent statement, David.

Let us turn to John for his remarks.

Mr. COSTIGAN. Good morning, Mr. Chairman, members of the Subcommittee. My name is John Costigan. I am the Chief of the Environmental Litigation Section of Attorney General Bob Butterworth's office. The Attorney General regrets his inability to be here this morning due to other commitments. He has asked me to summarize the testimony he has previously provided and to answer any questions you may have. I think already, I am going to alter the summary of his comments to address certain questions you have asked other witnesses thus far. But I am also Counsel for the State of Florida in the litigation ongoing between the three states, the corps of Engineers and a host of other parties who would like to be part of that litigation also.

The litigation itself was, of course, filed in late June by the state of Alabama against the corps of Engineers. And alleged in numerous counts in the complaint that the corps had failed to comply with the National Environmental Policy Act by not addressing or preparing even an environmental impact statement, doing a short-form environmental assessment that did not address the impact on all downstream users. Attorney General Butterworth, toward the end of July, decided to attempt to intervene in that litigation to protect Florida's interest, and the Attorney General has been joined by, first, an entity called the Inter-Agency Management Committee of the State of Florida, which consists of at least ten separate departments and agencies within Florida, the environmental regulatory agencies and—and Florida is united, I think—unlike Alabama and Georgia—in the interest it is trying to protect in this basin. It is fairly simply defined, that you continue with sufficient quantity and quality of freshwater to Apalachicola Bay, so it is able to keep that bay alive and functioning.

Alabama and Georgia, on the other hand, both suffer from diverse interests. I do not think you can say necessarily that Alabama—or rather that Atlanta necessarily reflects the interests of all Georgians in that system, particularly those downstream from

Atlanta. Those people may or may not—I would think they do have an interest more similar to Alabama and Florida in that river system.

But when Florida petitioned to intervene, it basically adopted the same allegations that Alabama did and it raised additional and new allegations, which is that the corps also failed to comply with the Coastal Zone Management Act and that its proposal was inconsistent with Florida's Coastal Zone Management Program.

Now, these are the bases of the lawsuit. We would like to be able to say that the corps failed to follow its orders from Congress by not paying sufficient attention to the welfare of the Bay as an authorized project purpose. But as you have already heard here today, the welfare of Apalachicola Bay is not an authorized project purpose. You know, flood control is, water consumption is, hydropower use, industrial use, navigation and even boating interests and recreation on Lake Lanier are. But in all this, these have all been determined apparently, to be more important in the operation and control of this river system than the welfare of Apalachicola Bay.

You have already heard from, I think, everybody that spoke and you will probably hear from everybody else who will speak today—at least from Florida—that that is number one on Florida's needs list. Until the welfare of Apalachicola Bay becomes an authorized project purpose, the State of Florida will consistently face situations like this, where the Army Corps of Engineers will place that bay at the bottom or not even on the list of its priorities. Now, this is not the corps fault necessarily.

I think—I have had a chance here to review the written testimony that Colonel Thuss submitted and then summarized. And on a couple—in a couple of different places, it is telling, on page 8, the language as follows, "The report also identified the associated impacts to all the 'project purposes.' Implicit or inherent in that is that if it is not a project purpose—and Apalachicola Bay is not—the report did not identify those impacts." On page 12 of his testimony, he says, "In summary, the corps has tried to be responsive to the water supply needs of the Atlanta region within existing authorities." Now within existing authorities is, as I understand it, the marching orders that the Corps of Engineers receives from Congress. Those existing authorities do not include the welfare of Apalachicola Bay, and they must.

Now the status of the litigation at this point is it is on hold. Florida agreed with the stay of the proceedings in order to negotiate an amicable resolution of the dispute between the parties. One of the things that is needed in order to do that is the funding of the comprehensive study. It will take a certain amount of money. It will take a certain amount of years. But until that is done, what this entire region faces is a continued—continued piecemeal disputes as continued piecemeal problems arise on this river system, whether it is drinking water in Atlanta or whether it is navigational interests in Alabama. On each and every occasion, the taxpayers are going to end up paying for everything involved.

For example, in this litigation, the taxpayers are paying for the State of Florida and its officials to litigate. They are paying for Alabama. They are paying for the federal judge. They are paying

for Atlanta officials. They are paying for the involvement of the Army Corps of Engineers. In fact, they are paying for everything, and that is not a sensible way to resolve disputes amongst governments and governmental entities.

It is much more sensible, in addition to making the Bay a project purpose, to fund this study. Only then do you have a hope down the road of being—of managing the system on a system-wide basis, where if Atlanta needs additional drinking water, you have identified already or you know what the impact will be downstream—not just to Florida, but to Alabama. And you can adjust and you can operate your water control plan accordingly. As I said, until that happens, this instant situation is just one of many in the past, and there are going to be a lot more and they are going to be a lot more frequent in the future.

You know, the value of the Bay and the river is undisputed. In Florida, as you have already heard, it is a designated area of critical state concern. It is an aquatic preserve. It has been designated as an outstanding Florida water. On the federal level, it is a national estuarian research reserve. And on the international level, it is an international biosphere reserve. I mean, in the face of all this, it is difficult to justify, I believe, in placing boating or recreational interests on Lake Lanier at a higher level than the welfare of this Bay. That has got to be addressed.

Now during the interim, if this tenuous stay of the litigation is maintained and if progress is made to resolve this matter without further litigation, it is going to take a couple of years. And another thing that Florida is going to need during that interim, it is effectively going to have to be treated as though it is a project purpose—not necessarily technically. That may give Col. Thuss and the corps heartburn. But to the extent that Florida has to receive what we would call historical flows during this interim period—during this three to four-year period or however long it takes—before Florida can agree to even the interim withdrawal of water from Lake Lanier to service Atlanta.

We have gone—we have been through this once before in the early 1980s. The last round—the issue was dredging rock shoals for navigational purposes. And although all parties dealt in good faith, it was an unsatisfactory resolution. The immediate problem was solved. The rock shoals were dredged and navigation was satisfied. And in return, there was of necessity a vaguely worded memorandum of agreement that was reached. It established a commission from the three states and the corps to address future needs. And it called for the kinds of studies that are addressed in the comprehensive study that is before Congress and discussed by Col. Thuss today. The only problem was, it was never fully funded and it was never fully completed. And it is essentially moribund today. And here we are back with another dispute—this time triggered by Atlanta's water needs. This will continue until the means are established and funded to study the river on a basin-wide system and to regulate it in that fashion.

Now, one of the questions I believe addressed to Representative Lawson was whether or not the State Board has conducted a water needs study. Of course, in the initial blush, we feel like, well part of that is the corps job—not necessarily to do a water needs study,

but if it is truly going to address the downstream impact, then it ought to know what the water needs are. The second part of this was that in 1983, a water needs study was part of that memorandum of agreement, and that is part of the—one of the items that was never completed or accomplished in the early 1980s, and it is still not done.

The northwest Florida water management district has been working on identifying the water need of Apalachicola Bay for at least the last ten years, and they have made progress, and they are the ones qualified to tell you, to the best of their knowledge today, what those water needs are. All I know is that it is incredibly complex, that it depends on certain times of the year, certain flows, certain regimes, et cetera. They have made as much progress as they can. Without the funding and making this a part of the comprehensive study, you cannot go much further.

So this is what we ask of you. This is what you can do to resolve the situation—at least at this point—as best as can be done and to relieve the taxpayers from the burden of paying for these continued disputes. And that is to make this Bay a project purpose. Fund the comprehensive study and that means fund it until its completion because we cannot have happen what happened in the early 1980s where the funding fell apart and it was never finished. And, a method to ensure so that the litigation is resolved that Florida receives historical flows during the interim while the study goes on. Only then, I think, can the states and the Corps and Congress effectively manage the river for the benefit of all.

Thank you.

Mr. NOWAK. John, thank you very much for your statement.

Let me turn to Monica Lemieux.

[The prepared statement of Mr. Butterworth appears on p. 77.]

Ms. LEMIEUX. Thank you, Mr. Chairman, and members. My name is Monica Lemieux, and I am Legislative Aide for Senator Vince Bruner, who represents nine panhandle counties, including Franklin, which is at the Apalachicola River. On a personal level, I am from Apalachicola—actually live in Apalachicola. On behalf of Senator Bruner, I want to thank the members of the Subcommittee and the staff for holding this hearing in Tallahassee today.

Senator Bruner is very concerned with the proposal to proceed with the water reallocation change from hydropower to water supply at Lake Sidney Lanier. We are aware that the corps, in response to increasing demands for providing water to metropolitan Atlanta area, developed a proposed water control plan and a proposed report for the reallocation of water from Lake Sidney Lanier. These two proposals, of course, were combined into the Post-Authorization Change Report.

In February of 1990, Florida notified the corps that these proposals were inconsistent with Florida's federally approved coastal management program. The primary basis was the corps' inadequate consideration of the project impacts on Florida's resources. Responding to similar concerns, the State of Alabama filed suit against the corps, and we understand Congressman Bevill of Alabama has proposed comprehensive studies to address both the water needs of metropolitan Atlanta area and the downstream users. Planning monies were included in the House version of the

Energy and Water Development Appropriations bill; though the Senate version does not have the corresponding appropriation. Florida's Attorney General Bob Butterworth, of course, has intervened in this suit.

The Apalachicola River and Bay system contributes very significantly to the economic well-being of communities along its shores. Barge trafficking, agricultural interests, power supply producers, along with recreational and commercial fishermen all depend upon the water quantity and the water quality which flows through this system. Shrimp, crab, oysters and numerous species of fish are produced in the Apalachicola estuarine system.

On behalf of all the individuals and entities, Senator Bruner supports the Attorney General in his effort to intervene in the lawsuit. Further, he urges the U.S. Army Corps of Engineers not to take any action until completion of an acceptable water needs study and a basin-wide water resource management strategy can be completed. Senator Bruner is committed to obtaining state funding to support the water needs study being undertaken by the Northwest Florida Water Management District. On behalf of him, I urge each of you members of the Subcommittee on Water Resources to support federal funding for the much needed basin-wide water resource management strategy.

Further, Senator Bruner requests each of you to include the need for the freshwater supply to Apalachicola Bay as an authorized project purpose. Our precious water resources are in limited supply; but with a cooperative spirit between the states and the federal agencies, a workable compromise can be reached which adequately addresses the needs of all the water users, including Apalachicola Bay.

On behalf of Senator Bruner and all of Florida, I appreciate the opportunity to testify before you this morning. And we thank you very much for making it available here to us on a local level. I will be glad to answer any questions if you have any.

Mr. NOWAK. Thank you very much. In the testimony yesterday, we were talking about the water levels, and I believe the figure is 1.18 percent of the water input into the Bay would be affected with the reallocation that you are in the lawsuit with now. The proposals to look at that through a NEPA study or the total basin study—as you are going through your negotiation now, that you have got—you have obtained a stay and joined those issues. Are you planning to look at that level question and all the others—quantity, quality—together as a package to see what could be resolved for the possible avoidance of a long-term litigation on this question? What is the State of Florida looking at while you move forward.

Mr. COSTIGAN. Absolutely, Mr. Chairman. I think—you know, the Attorney General recognizes that just as Florida has a legitimate interest and serious needs in the system, so, too, do Atlanta, Georgia, Alabama. The path down which we are headed, hopefully, with the stay is one that will obviate the need for further litigation. Now, there are a lot of pieces to that puzzle.

The comprehensive study is critical. If that falls apart, probably everything does. But, at the same time, what we are trying to do is to meet the immediate or interim needs or agree—reach agree-

ment—you know—between Alabama, Florida, Georgia and the Corps on Atlanta's immediate interim needs. Without permanent water storage contracts of any kind, until a comprehensive study is completed, we do not know that those figures are correct. A lot of this stems from, you know, a lack of study as to whether or not those figures are correct or what the impact is. And that, obviously, is the question, that is the issue of the lawsuit—that the homework has not been done. The study has not been conducted, and nobody really knows. So while we do that, we do not intend to take the position at all that Georgia gets nothing or Atlanta does. We recognize their needs, and we want to resolve those. There may not be as much water on the interim basis as they want right now. Hopefully, it will be what they need while the study is being done.

That is part of the package that is being addressed. And I would like to say also that Col. Thuss, I think it has been said his first act as head of the Mobile District was to get served with a summons and complaint in this litigation. He has done, at least in my view, a superb job thus far in trying to bring the parties together and resolve this.

Mr. NOWAK. Thank you very much.

Now, let me turn to Congressman Stangeland.

Mr. STANGELAND. Thank you, Mr. Chairman. I have no questions, except I do want to clarify one thing. I do not want Mr. Lawson or you, Mr. Costigan, to leave here thinking that I feel Florida is derelict in not having the figures of the minimum low flow required. That was not the purpose of my question. Since the corps does not have that, I was curious to know whether Florida did or Fish & Wildlife, and apparently, nobody has those figures. I would also say that you might well, when you refer to the needs of the Apalachicola Bay discuss minimum low flow required, as opposed to historical flows, because historical flows may get us into a situation that is not going to work out.

I think we have to ask our question for Atlanta as well. And the question we have to answer for Atlanta is how much can they expect to draw, and then they can project their population because at some point in time, they cannot draw any more. And they have got to have—they have got to know, to a degree, what that is so they can make alternative long-range plans for their water needs because Atlanta is going to grow and they are going to need more water. And they discussed yesterday the possible need for some—possible need for some reservoirs. However, those reservoirs would have to be, more than likely, constructed in wetland areas, and that is a no-no today. That is a tough one. They are talking about the need to drill into crystalline bedrock to determine how much water will be available. But you people have to know how much water you require to maintain that Bay and that is why this long-term study is absolutely essential.

I thank you for your testimony.

Mr. NOWAK. Congressman Grant.

Mr. GRANT. Thank you, Mr. Chairman. I would just like to say that Congressman Stangeland said that Atlanta is going to grow. You know, but the question for us is at what price? And we are—you know, I am not—I think you put it real well when you said that we have, in our mind, as great an interest—in fact, greater

interest, we think, in the public—for public purposes that we protect an ecological and economic environment over and above their recreational interest, you know. And the City of Atlanta does not have to grow. The City of Atlanta can do some things that Florida has had to do, too. We have had to deal with this thing, and I just do not think that we ought to totally disregard growth for the City of Atlanta. Obviously, they will have some growth; but they are going to have to get tough with themselves, too.

And I hope that you will keep the pressure up with your lawsuit, frankly. Because the first two points that you made, we can—I hope we can make some impact. Making the Bay a project purpose is on the agenda. It is going—it may be tough to do if we do not try to balance Atlanta's needs with it, and that is what we are trying to do. We want them to see ours as well, and we have got a million dollars now in the House Appropriations bill that we passed. And the Senate does not have it in there, but I think the indications are that we will probably keep it in there. It is just practical politics. Tom Bevill is the Chairman of that Subcommittee, and somebody in the Senate is going to want something. And I think that it is important enough to Chairman Bevill to keep in there, so I think that will make them stay in there, and we are going to have it for—we are going to have that study.

The question that bothers me the most is in the interim. And you make a good point there. In the interim, what—how do we make sure that our interests are protected? It may be very difficult to pass implementing legislation to see that that is done. Georgia has got more people on the committee than Florida does for one. But—so, we have to go armed with just as many hard facts as we can, and I think that is what we are holding this hearing for, to try to prove to my colleagues that our interests are just as important. I think they are more important—just as important. Thank you.

Mr. NOWAK. Thank you very much.

Our next panel is listed as Panel III, with one exception, we will have Virginia Wetherell, who is the Chairperson of the Interagency Management Council, State of Florida. If she will come forward, along with Walter Dover, who is the Executive Director of the Northwest Florida Management District, State of Florida. Woody Miley, who is the Apalachicola Estuarine Department of Natural Resources, State of Florida. And Don Hines, who is the Chief of Planning and Economic Development, Department of Economic and Community Affairs, State of Alabama. If you would like to present your testimony. All of your formal statements will be incorporated in the record at this time.

TESTIMONY OF VIRGINIA WETHERELL, CHAIRPERSON, INTER-AGENCY MANAGEMENT COUNCIL, STATE OF FLORIDA; WALTER DOVER, EXECUTIVE DIRECTOR, NORTHWEST FLORIDA MANAGEMENT DISTRICT, STATE OF FLORIDA; WOODY MILEY, APALACHICOLA ESTUARINE, DEPARTMENT OF NATURAL RESOURCES, STATE OF FLORIDA; DON HINES, CHIEF OF PLANNING AND ECONOMIC DEVELOPMENT, DEPARTMENT OF ECONOMIC AND COMMUNITY AFFAIRS, STATE OF ALABAMA

Ms. WETHERELL. Thank you. Good morning. My name is Virginia Wetherell, and I am the Deputy Assistant Executive Director for Florida's Department of Natural Resources. I apologize for the redundancy in my remarks this morning; but I am here as Chairman of the Coastal Resources Interagency Management Committee of Florida, which is composed of eleven agencies. So I would like to go ahead and give my remarks, even though you have heard most of the major points.

Mr. NOWAK. Well, if we—if you would like to just summarize briefly, we will incorporate all of your remarks. I think we would like to, you know, enter into a little more dialogue as we accept the statements, Virginia.

Ms. WETHERELL. What I would like to do then, since we have Woody Miley from our department, who will talk about the resource values of the——

Mr. NOWAK. Tell me something about your agency. Who is at—you say Interagency Management Council, State of Florida. How is that put together?

Ms. WETHERELL. The Governor's Coastal Resources Interagency Committee is made up of eleven agencies that each have coastal responsibilities. We have a recognized—federally recognized coastal management plan.

Mr. NOWAK. You run your coastal zone management act and so forth?

Ms. WETHERELL. Correct.

Mr. NOWAK. Do you distribute the money?

Ms. WETHERELL. Correct. Our committee receives applications, and we approve the grants under the Coastal Zone Management Act. In addition, we try to review all coastal issues and while we cannot bring resolution on all issues because in some cases, our authorities are different, we try to air all of the controversial issues that deal with the coastal zone of our state, which is the entire state of Florida.

Mr. NOWAK. As chairperson of that, you have—were you appointed by the Governor for that position?

Ms. WETHERELL. No. Under the statute, there is—the recognition of each agency has either their head or a designee of the head of the agency as a member of the Commission. And so, we meet on at least a quarterly basis, but usually, more frequently than that.

What I would like to do, with your permission, is to go to the summary of our remarks and—that would be to—the current pages are not numbered, but the last two pages of our remarks. And Woody Miley will give you more of the resource concerns that this agency and this Inter-Agency Management Council has.

Mr. NOWAK. Sure.

Ms. WETHERELL. So in summarizing the entire position of the state, the first point is that no water supply allocation decision should be made until completion of the comprehensive study of the ACF river basin. Short-term water supply contracts should only be allowed during the course of the study if it can be scientifically demonstrated that the withdrawals will not have any significant effect on Apalachicola River and Bay. The beneficiaries of these short-term contracts should be notified that these interim provisions may have to be changed after completion of the comprehensive study. The provision of flows equal to historical amounts on a weekly basis must be accomplished. Efforts to provide historical flows must include managing water in all of the federal reservoirs and managing withdrawals from the non-impounded Flint River. And finally, the freshwater supply needs of Apalachicola River and Bay need to be elevated to the highest level of protection by making the provision of those needs an authorized project purpose of the federal projects for the ACF river system.

I have really summarized our remarks. And if you would like to ask any questions in regard to these remarks or the report which we submitted to you earlier this week, we would be happy to do that at this time.

Mr. NOWAK. Thank you very much.

I will turn to Walter Dover. Mr. Dover.

[The prepared statement of Ms. Wetherell appears on p. 157.]

Mr. DOVER. Mr. Chairman, members of the Committee. My name is Walter Dover. I am the Executive Director of the Northwest Florida Water Management District. The Northwest Florida Water Management District is mandated by state law to preserve, protect and manage the waters of northwest Florida. Within this region, the district has primary state jurisdiction over the regulation and management of water uses, including in-stream flows necessary to preserve fish and wildlife.

The Apalachicola River and Bay support one of the most productive and valuable estuarine resources in the state of Florida and the southeastern United States. Because of this fact, the district has a long-standing commitment regarding the protection of these unique and important natural resources.

At a cost of over $10 million in public funds, the Northwest Florida Water Management district has purchased some 35,500 acres contiguous to the Apalachicola River and Bay to help ensure the continued health and productivity of the system.

In addition, the Apalachicola River and Bay have been ranked the highest regional priority under Florida's Surface Water Improvement and Management Program. This district, together with several other agencies, is committing considerable effort to comprehensively address the needs and the issues relating to the system. Part of this ongoing effort is a detailed assessment of the freshwater needs of Apalachicola Bay's diverse ecosystems.

The overall productivity and viability of the Apalachicola system, however, are heavily dependent upon the timing and quantity of freshwater inflow from out of state, specifically from the Flint and Chattahoochee Rivers.

The Northwest Florida Management District is very concerned, therefore, that its analysis of the Post Authorization Change Notifi-

cation Report relating to Lake Lanier, that the U.S. Corps of Engineers has not adequately addressed the basin-wide impacts of its proposed action, including any adverse impacts upon the Apalachicola River and Bay system. Information provided in the PAC Report is simply insufficient to gauge potential impacts, especially during periods of low flow.

To our collective loss, we have discovered too many times that fish and wildlife are far less adaptable to artificial changes in freshwater supply than human beings.

Our serious concerns about the corps' proposed actions are reflected in a resolution adopted by the Northwest Florida Water Management District's Governing Board on August of this year. Many of its recommendations parallel those of the Coastal Resources Interagency Management Committee submitted for this committee's consideration.

The Governing Board urges that none of the proposed actions in the PAC Report be undertaken prior to the completion of a water needs study and basin-wide plan of the AFC River Basin in its entirety, including the freshwater needs of the Apalachicola River and Bay.

The Governing Board also urges that a mechanism for interstate consultation and mediation be established to guide the development and implementation of this basin-wide management program to ensure equity for all concerned parties.

And lastly, the Governing Board seeks and supports federal designation of the freshwater needs of the fish and wildlife of the Apalachicola River and Bay as an authorized project purpose of the ACF waterway.

The Northwest Florida Water Management District is encouraged by the corps' proposed comprehensive studies. We believe that with the good will and commitment of the parties involved and with an appropriate mechanism to undertake these studies, that the water use and water rights issues within the whole ACF Basin can be satisfactorily resolved. This agency is eager to assist and cooperate in any way it can to further this effort.

We wish to stress, however, that undertaking the proposed PAC Report actions at this time is premature and potentially damaging to a resource that cannot be replaced. We urge your consideration in this matter.

And, I thank you for the opportunity to provide this testimony.

Mr. NOWAK. Thank you very much.

Woody, would you like to present your testimony?

Mr. MILEY. Yes, sir.

[The prepared statement of Mr. Dover appears on p. 87.]

Mr. MILEY. Mr. Chairman, Committee members, I am Woody Miley. I am the Manager of the Apalachicola National Estuarine Research Reserve. The Apalachicola-Chattahoochee-Flint River system is a regional resource. Only through man's innovation do the names and management strategies change at political boundaries. Realizing this, the Governors of the three states appointed an Interstate Coordinating Committee in 1983. Florida participated in this ICC with the understanding of a partnership. This partnership included the recognition of Apalachicola Bay as a user of freshwater on equal footing with other resource users.

Florida has shown a willingness to work with the other states in this ICC. And in 1984, up-river navigation interests needed some rock shoals removed from the upper Apalachicola River. For fish and wildlife habitat reasons, Florida was initially opposed to this removal. In the spirit of partnership, Florida permitted this project. In return, Florida was led to believe that we would benefit through such vehicles as a 308 study and a Navigation Maintenance Plan. Florida bargained for and received a commitment for recognition as a water resource user and in cooperation for the development of a basin-wide management strategy for the entire system.

The Navigation Maintenance Plan for the ACF, prepared as a cooperative effort between the states of Alabama, Florida and Georgia and the Mobile District of the Army Corps of Engineers, was developed based on two goals. The first was to provide authorized project dimensions in a cost-effective manner and in a manner in which the—there would be no net degradation of environmental resources. The second goal was to closely coordinate management issues on the system with all appropriate parties. This plan was signed by members of the ICC representing the Corps of Engineers and the Governors of the three states, and it recognizes Apalachicola Bay as a user—a legitimate user—of the freshwater in this system.

Information from the Corps of Engineers states that Florida will continue to get their fair share of water—water supplied to our estuary and that "we just do not understand". Well, although public water supply is only 20 percent of the total withdrawal, it is by far the largest consumptive user. The 1984 assessment report shows that only 51 percent of the water removed from the water supply was actually returned to the system. By contrast, the largest withdrawal is thermoelectric power. They represent 67 percent of the total withdrawal. But, 91 percent of that water is returned to the system.

Even in the unlikely event that we should receive the same amount of water that we have historically, it is they that do not understand. It is not just the amount of water that comes to us. Apalachicola Bay is totally dependent on detritus, dead decaying plant matter, for our incredible seafood production. That detritus is in the form of leaf litter that falls in the river swamp each year. It is the gasoline that runs the engine in the Bay. Without our annual winter and spring floods, there would be no transport mechanism to deliver those vital nutrients to the system, and the system would, in effect, starve—run out of gas, if you will.

Averaging out our annual flow—even if it were the same volume—would reduce seafood production in one of the most productive estuarine systems in the Northern Hemisphere. Any productive estuarine system is a highly complicated system with many variables. One of the few that we can tie our productivity to is oyster production and river stage. High river flows were experienced in 1979 and 1980. 1980 and 1981 were record oyster production years. 1981 was a drought year. 1982 oyster production was 2.5 million pounds less than the previous year. 1983 was again a high river flow year, and oyster production doubled in 1984.

Apalachicola Bay's dockside seafood value of $12–16 million is the sole economic basis for the area. Our subjective worth at the consumer level is more impressive at $70–$80 million a year. Our oyster harvest comes from approximately four percent of our Bay. We know from research that 40–50 percent of our Bay could product oysters just if the bottom type were right. If we had something there for attachment of the oyster spat. Well, the extrapolation from that is instead of four to six million pounds of meat a year, we could produce 150 million pounds of oyster meat a year. To put that production into perspective, five million pounds of oyster meat would cover a football field three feet deep in the finest oyster in the world. One hundred and fifty million pounds of meat a year would cover that field 90 feet deep in the finest oyster in the world. With existing technology and new interest in aquaculture in Apalachicola Bay, our oyster production is virtually limitless. A good oyster bar produces approximately 400 bushels of oysters per acre per year. The new aquaculture techniques that are being worked on in Apalachicola Bay can produce 2,500 bushels on one acre each year.

And even though the economics that we can prove with our dockside value, the economics that we can suppose through the multiplier effect are impressive and our potential is certainly impressive, they do not yet come close to telling the story of the importance of the Apalachicola estuarine system. Over 95 percent of all species harvested commercially from the Gulf of Mexico spend a portion of their life cycle in an estuarine system. Blue crabs, for example, migrate as much as 300 miles to spawn in Apalachicola Bay. They spend their larval and juvenile stages in our marshes. Then, they scatter out all over the Gulf. So do the shrimp, so do the fin fish. They are caught somewhere else. They are landed somewhere else, and they are reflected in somebody else's dockside value. But, that product would not be there if Apalachicola Bay was not where she is and in the relative pristine productive condition she is in.

Planning in the short-term, relative to a finite resource, such as water, for a dynamic metropolitan area, such as the City of Atlanta, is irresponsible. Projecting water needs through—for 20 years will get present decision-makers through their political or professional careers, but what it does is pass a much more complicated problem onto the next generation of decision-makers. In effect, we will be in the process of making their decisions for them because they will have no more options left when you deal with a finite resource.

There are several research projects underway to determine the freshwater needs of Apalachicola Bay. The main one you have heard this morning is through the SWIM program. It is the information we need in order to negotiate with other resource users. And there is also a very strong and growing support for basin-wide management. For any one user group on this system to allocate increasing—to support increasing their allocation at the expense of other users at the present time is both presumptuous and premature.

Florida is entitled to historical flows from this system from any standpoint of analysis, whether that analysis is done through economics, environmental or moral considerations. Thank you.

Mr. NOWAK. Thank you very much, Woody.

We will turn to Don Hines, who is the Chief of Planning and Economic Development, State of Alabama.

[The prepared statement of Mr. Miley appears on p. 124.]

Mr. HINES. Mr. Chairman, on behalf of Governor Hunt, we appreciate the opportunity to be with you again today. Our comments were presented in great detail yesterday and have been provided formally to the Committee. So, I will not go through that again.

I would like to say that we appreciate Congressman Grant's support in this matter in working very closely with us, the Florida Governor's Office and the Florida Attorney General's Office for they very aptly stated our position several times this morning. So, I will respond to any questions that you may have.

[The prepared statement of Mr. Hines appears on p. 94.]

Mr. NOWAK. Thank you very much, and thank Governor Hunt for his testimony.

We will, of course, be following with great interest the negotiation that the corps will be involved in. I think it is helpful, of course, that the corps members hear and they are receiving the testimony as we are. And some of this—the new movement—some new people coming in—it may, you know, have an impact that perhaps was not garnered during the previous process that the Corps went through. The estuary value is great at the federal level. We are trying to pass some legislation that is going to have, hopefully, some positive environment impacts on all of our estuaries throughout the country.

I think the realization of what they produce in terms of the quality of life and sport fishing industry and for the commercial fishing industry is—has been in the past greatly under-estimated. And if we do not take care of those bays and estuaries, where the lack of commercial fishing, which never was really tied in very closely with somebody putting some—perhaps 20 miles inland some DDT on their field. And all of a sudden, the guy 400 miles out in the ocean cannot catch a fish and never really looked at that kind of, you know, inter-connection. But hopefully, we are doing more on a federal level, which will again have an impact by itself on this Bay and all the other estuaries throughout the country.

In looking at your particular problem, I think you will have the opportunity because of the intervention stay that has occurred now to have the corps revalue and the whole process that they have used and see what additional information could be satisfactory.

We have had the Water Resource bill just passed this week—1990. And one of the big issues that occurred in the Missouri Valley—there are ten states that have different interests in that whole system. And someone wanted to amend section 16 of the Water Resource Act that we presented to the floor. And it started out as a very small, meaningless amendment talking about putting some kind of compact together. When the other states found out about that, every representative in the world wanted to speak. We could have stayed right there and invited all of the members

throughout that Midwest affected area to testify for the next six months and could not—would not be able to resolve it.

We do have a general statement because of all of these that are coming up, and I do want to remind people of what seems to be happening when these Corps projects were built and purposes established some 40 to 70 years ago. You had a completely different geographic and social environment when those purposes were made. You have different navigation interests than you had before. We have different export commitments throughout the world, and some navigation interests have changed dramatically. And we are really in a state of flux. And it is not only in this area; it is every basin we look at. And the Great Lakes Basin is no exception.

So, what we have done is asked the corps headquarters in Washington to start to review these public purposes and go through a public input period once those are reviewed and come back to us in a time frame of nine months or a year, 15 months, 18 months—different progress kind of reports so that we can have a review of these that are 50, 60, and as I say, 40, 30 years old—just tremendous changes within, you know, the operating control of a system that the corps had put together with public purposes for which those were built. The dynamics of our society have changed so much that we decided to go ahead with all of these. And, I am anticipating we are going to be going out to—from California to Maine to revisit many of these. And it is going to be an enormous task and job, as you can imagine, by just the development of what has happened in this system from Atlanta to the Bay. You magnify that all over the country, and some of these systems are huge. And with as many adverse, you know, interests in each system.

But, we appreciate your testimony, and we will be following this negotiation because I think to some degree, this could really—if the negotiation could be successful, brought forth as a model. Many of these other could be patterned after such compacts. But, we will have to wait and see. Or else, of course, the Water Subcommittee that we have here today is going to have a very busy time for the next 100 years trying to sift through all of these new and diverse interests.

Let me turn to Congressman Stangeland.

Mr. STANGELAND. I have no questions, Mr. Chairman. I just thank the panel for their testimony. Is it Dr. Miley?

Mr. MILEY. No, sir.

Mr. STANGELAND. Some of your points would almost sound like you and I had a discussion last evening. As Mr. Grant points out, you know, the growth is not required. But growth will happen in certain areas just because of dynamics. But those people who are in those growth areas have to understand that they cannot continue to depend on what they depended on in the past. They have to make alternate plans.

I think I made the point very strongly yesterday that one of the things we have to look to is better conservation. You know, we got caught in an oil embargo earlier. Now we are caught in another oil crunch. We had conservation for awhile. We forgot it. We are a society of waste, and we cannot afford to waste a finite resource like water. We have got to find every measure of conservation possible and make sure that everybody gets their fair share and their

proper share of that water to benefit their social and economic needs.

I thank you.

Mr. NOWAK. Congressman Grant.

Mr. GRANT. Woody, you mentioned something in your testimony here that is interesting. You said, "Averaging out the annual flow, even if it were the same volume, would reduce seafood production." Would you expound on that just a little bit more, please sir.

Mr. MILEY. Yes, sir. The energy driving force for seafood production in Apalachicola Bay is the leaf litter that falls in the river swamp. That is the—dissolved organics that produces our phytoplankton based portion of our productivity and the actual leaf litter itself is the major part of the—of seafood productivity. That is the energy source. Ours is a very muddy river. We have very little in the way of seagrasses. So—or very little in the way of phytoplankton—the uni-cellular plants that is the basis of production in other estuarine systems. We have a few areas that have some. But, even they depend on the detritus for the nutrients that produces that. Basically, ours is totally dependent on the leaf litter that falls in the river swamp. The river floods are the transport system that bring the nutrients to the Bay.

So freshwater is important to Apalachicola Bay for several reasons. One is the transport system for the energy driving force. The other is during drought and low flow conditions—without exception, or with the possible exception of the blue crab, all parasites, predators and diseases of oysters require high salinity. So, when we average out the flow and change the salinity gradient in the Bay, we open our oyster bars up to all the bad boys in the Gulf of Mexico to come in during periods of low flow and devastate our bars. So, both ends of the scale are important to Apalachicola Bay. Low flow cannot be too low, and we have got to have those pulses or we lose our productivity.

And, Mr. Nowak, the points you made about the dynamics of human populations growing are very real—the dynamics of our system changing. The problem is, we are matching that against the dynamics of a system that probably has not changed for at least 6,000 years. It is a highly diverse system that has evolved within ranges of its production. And our changes are so rapid that our effect on estuarine systems is almost invariably in a downward motion for productivity.

Mr. GRANT. What happened when the dams were put on the river?

Mr. MILEY. There has been some averaging, Congressman Grant. I do not have those numbers on the top of my head, but we have had lower high flows—fewer high flows and increased low flows since the dams have been on our system.

Mr. GRANT. So oyster production has been adversely affected because of the dams? Is that a fair statement?

Mr. MILEY. Yes sir, but it has also helped during periods of extreme low flows in that we probably get more water now at extreme low flows than we did naturally because of the projected water use of hydropower and navigation. As long as they let it through the dams—it comes to Apalachicola Bay. So if those are maintained as the primary uses of some of the reservoirs, as long

as those releases are made, they can actually help us at extreme low flows. But overall, it has had a detrimental effect on oyster production in Apalachicola Bay.

Mr. GRANT. Is there any way—any formal way that if we are in a drought situation in the southern part of the basin that we can ask for increased flows—is that—is that done?

Mr. MILEY. There has never been———

Mr. GRANT. No coordination.

Mr. MILEY. There has never been a release that when the chain was pulled said, "This one is for you, Apalachicola Bay." We benefit from releases of other users of the resource. But there has never been a release that says, "This one is for us."

Mr. GRANT. The City of Atlanta testified yesterday that they would replace 70 percent of the water that they took out of the system. There was a great deal of concern about the quality of that water. The quality, obviously, will have an impact downstream, too, will it not?

Mr. MILEY. Yes sir, it will.

Mr. GRANT. All right.

Mr. MILEY. What is protecting us there is that our flood plain and marshes are relatively intact. We have the—we have the most pristine bottomland hardwoods left in the United States. And that gives us some degree of buffer. So if they do not exceed—well, we can take out heavy metals and stuff. But the phosphorus and nitrogen pollution that is playing with West Point Reservoir is probably not a major concern for us in the immediate future. However, with the dilution factor reduced and total growth—total potential growth in Atlanta, it could become a major problem for us in the future.

Mr. GRANT. Wastewater, for example—what kind of impact would that have? They treat it, I am sure, but what kind of impact would that have? Does it have to—does it have to come in a sort of an untreated stage? Does that matter downstream? Does that matter?

Mr. MILEY. The treatments that are given—tertiary treatment takes most everything out, except nitrogen and phosphorus. Those are fertilizers. Fertilizers are a good thing, but you can get too much of a good thing.

Mr. GRANT. Believe me, we know that.

Mr. MILEY. For the aquatic system, that is cultural eutrophication but, you can burn a corn crop if you put too much fertilizer on it. Now other pollutions, such as heavy metals, industrial stuff that comes down, would be an immediate problem for us because they bio-accumulate and bio-magnify. If we have a certain amount of copper or lead or zinc or cadmium or any of the heavy metals and it gets into the food chain or if—if, for example, one algal cell had one unit of copper in it and some small fish eats 100,000 algal cells, he now has 100,000 units of copper, which does not get out of his body. So we have a bigger fish that eats 10,000 of those little fish, and you can see the idea of bio-magnification. The higher you go on the food chain, the worse that problem becomes.

Mr. GRANT. Walt, you did a study—did you have a ten-year study? Did someone tell me you had a study that had been going on ten years?

Mr. DOVER. If I may, Congressman Grant, let me refer that to staff. The—we did not really have—we did not have a ten-year study, I do not believe.

VOICE. No, we had been monitoring the flow into the system and had been doing some work. But, we have not done a study of the freshwater needs of the Apalachicola Bay.

Mr. GRANT. Does the corps ever come to you and ask for your information?

Mr. DOVER. As far as—as far as what?

Mr. GRANT. The impact on the system.

VOICE. As Woody mentioned, there was a three-way ICC that was established several years ago. We participated in that.

Mr. GRANT. But, they—the studies you have done, they never formally request those?

VOICE. Not to my knowledge.

Mr. GRANT. Thank you.

Mr. NOWAK. Thank you, Congressman. There is no reason why those studies cannot be—and any other information you want to send, especially now that the lawsuit has been joined and stayed to the corps for their consideration and, of course, to your own state litigants who are in that decision-making process.

Once again, thank you for your information, and it was interesting. We will hold the record open for other additional questions that we may have as this whole process proceeds. Thank you very much for your time.

Mr. GRANT. Ginger used to be on the other side of the table. She was a member of the legislature here in Florida.

Ms. WETHERELL. Another lifetime.

Mr. NOWAK. We will—we have three more panels to go. We are about halfway through the process, and I think that maybe we would be well served—we will take a ten-minute recess and come back at 20 after for the fourth panel.

The Committee stands in recess.

[Recess.]

Mr. NOWAK. The Subcommittee will come back to order, and we can ask everyone to take their seats. And if they have to converse, I hope we could do it out in the hall. Except for the panelists who are on the fifth—fourth panel, we could invite everybody back into the room and bring forward from the Sierra Club, Noreen Chase, who is a member; and from Florida Wildlife Federation, Manley Fuller, who is the President; and from the Florida Defenders of the Environment, Steve Leitman, who is the Coordinator. If they will take their chairs, and we are missing—Noreen Chase. Is she—are you Noreen?

Mr. KIXMILLER. No, Noreen is not here today. My name is Dan Kixmiller.

Mr. NOWAK. We did not have that change. I am sorry. You are going to testify in lieu of Noreen Chase?

Mr. KIXMILLER. Right.

Mr. NOWAK. And your name is?

Mr. KIXMILLER. Dan Kixmiller, K-i-x-m-i-l-l-e-r.

Mr. NOWAK. Seeing as you are taking her place, she was going to be the first witness. I assume ~~you are~~ Manley Fuller.

Mr. FULLER. Yes, sir.

Mr. NOWAK. We will proceed. And Dan, if you want to take the podium now and present your testimony.

TESTIMONY OF DAN KIXMILLER, SIERRA CLUB; MANLEY FULLER, PRESIDENT, FLORIDA WILDLIFE FEDERATION; STEVE LEITMAN, COORDINATOR, FLORIDA DEFENDERS OF THE ENVIRONMENT

Mr. KIXMILLER. Thank you. It is a privilege to be here. I would like to echo——

Mr. NOWAK. Would you move the mikes just a little closer.

Mr. KIXMILLER. I would like to echo the thoughts and intelligent comments that have come before about the importance of the interests of the Apalachicola River. I have a statement from Elaine Herrington, who is the Chairperson of our local club.

Gentlemen, thank you for the opportunity to speak with you today on the problem of water allocation in the Apalachicola Basin. I am speaking to you today as co-chair of the Big Bend Sierra Club with about 900 members in this area of Florida. The Apalachicola River and Bay lie within the geographic limits of our approved jurisdiction for the Sierra Club. Naturally, we are very concerned about the health of our river.

Unfortunately, the memorandum of understanding between the Corps of Engineers and tri-states concerned is an imperfect document. It does not assure Florida that their continued use of waters from its northern tributaries, does not assure us the delivery of freshwater in a way that is normal for the estuary and oyster beds. It does not assure us that our rights in interstate water use are protected.

There is a statement that I just received from the Florida chapter, which is—represents 20,000 members. I will read the first paragraph:

> The Florida Chapter Sierra Club objects to the present allocation of Lake Lanier water for the City of Atlanta use without a tri-state—Florida, Alabama and Georgia—environmental impact statement and substantial completion of the proposed comprehensive studies planned for the Apalachicola-Chattahoochee-Flint River Basin and the Coosa-Tallapoosa River Basin. The environmental impact statement and comprehensive studies planned should be jointly conducted by the United States Army Corps of Engineers and United States Environmental Protection Agency, Region IV. Atlanta and its suburbs get water from Carters Lake and Lake Allatoona on the Coosa River, but discharge their wastewater to the Chattahoochee River, which represents an inter-basin transfer of millions of gallons per day. This transfer and conversion of the wastewater involves Florida, Alabama and Georgia in both basins and requires their equal participation in any studies, regulation and allocation.

And I would like to add that the Army Corps is proposing to start withholding water now while the project is studied. But if the study shows the allocation can be detrimental to the more important interests, how difficult would it be to deny Atlanta users who have become dependent on the increase? We should continue the historic flow until the authorized project purpose study is completed—the comprehensive project study is completed and the Bay becomes an authorized project purpose.

And I was curious—Florida has to deal with water conservation, and it is a common problem. We all work on water conservation. I wonder if Atlanta should make that a priority.

Thank you. I am glad that people are listening to us down here in the Panhandle.

Mr. NOWAK. Thank you very much.

We will turn to Manley Fuller for his statement.

Mr. FULLER. Thank you, Mr. Chairman, Congressmen, Congressman Grant. I am Manley Fuller, President of the Florida Wildlife Federation. We are a statewide conservation organization with approximately 12,000 members. We are affiliated with the National Wildlife Federation. I believe Dr. Rudy Rosen from the National Wildlife Federation spoke yesterday, and he spoke for the various Wildlife Federation affiliates within the Basin—the Alabama and Georgia Wildlife Federations. So his—my comments—our official comments were presented yesterday by Dr. Rosen. And what I want to do is highlight some of our specific concerns in this area and give you additional specific suggestions. But, that is our official testimony.

The Federation would like to express its support for the—for the positions that have been outlined by previous speakers, and we are in close alignment with remarks that you will be hearing from Mr. Leitman of the Florida Defenders of the Environment. Previous speakers, including especially Woody Miley, pointed clearly—pointed out clearly to the committee the values of the Apalachicola River and estuarine system and their interconnections and the importance of timing, as well as quantity of water. There are issues of quality and the timing of discharges, which are very important. So we are in agreement with most of what you have heard so far this morning.

We are not in support of the currently proposed reallocation plan because there are many unanswered questions about issues, such as water quality, conservation and environmental impacts downstream of Atlanta, all the way to the Gulf of Mexico.

Our recommendations are—rather than to proceed with the reallocation plan, are that we should—that the Corps of Engineers, as the previous speaker indicated, in conjunction with the Environmental Protection Agency—also, I believe heavy input from the U.S. Fish and Wildlife Service and the National Marine Fishery Service would be beneficial. That the environmental impact statement should be prepared on the reallocation plan. An EIS should be the first step in addressing issues with the proposed reallocation plan. An EIS would provide the public additional needed information about water conservation needs and water quality and address what we believe are deficiencies in the corps' environmental assessment. We believe the EIS must consider foreseeable effects on water quality to downstream water users due to development and population growth that may result from the proposed action.

The reason for water allocation is to provide the Atlanta metro area additional water, which will foster growth. And there are environmental impacts associated with such growth. We believe Atlanta must institute a water conservation plan within the Atlanta metro area and that other—any other urban areas, such as the Columbus area, need to also—Columbus, Georgia area—need to have water conservation plans in place.

In Florida, especially in the lower basin, it is our organizational position, shared by many others, that we must maintain historic

water flows and quality for the Apalachicola River's needs and the Bay's. A comprehensive basin-wide water conservation plan for the Basin must be developed.

We are concerned that the pricing scheme currently proposed by the corps for water will not enhance water conservation. Mr. Wilson of Georgia Wildlife Federation, I believe, spoke on that subject in some detail to you yesterday in Atlanta as part of Dr. Rosen's presentation. We believe that pricing should be based on water use, rather than fixed storage would help conserve water. We believe that a price structure—that the more should be—prices for water should be structured that the more you use, the more you pay, and that this would help foster conservation. We believe that a useful step would be that water users in the basin—that all water users should be metered. It is my understanding that many of them are not currently metered.

Xeriscape—there is a lot of interest in Florida in xeriscape or use of native plants. This is being emphasized in southeastern Florida where there are a lot of—also a lot of water problems and water use problems. And we think that use of xeriscaping in the—especially in the Atlanta metro area—or use of native plants which have lower water requirements than a lot of ornamentals, should be emphasized.

We believe that the use of more efficient plumbing procedures by users in the Atlanta area, but throughout the basin, could have a significant positive effect on water conservation. You know, if you just think in terms of one house or one business, it is not that much. But we are talking about one of the fastest-growing areas in the country, and the cumulative effect of homes—old homes being retrofitted and new developments and stuff being required to use the most efficient plumbing equipment that is available now could help conserve our water resources.

On long-term needs, we believe it is important to create and implement an effective basin-wide water conservation program where all users within the basin comply with a comprehensive conservation plan. We think that there should be a requirement that there is zero degradation from the current water quality standards, with a goal of attaining a swimmable, fishable designated use throughout the Chattahoochee-Flint-Apalachicola River Basin by the end of this century.

We believe that flows must be—that there needs to be an evaluation and establishment of flows necessary to maintain water quality conditions for the—good water quality conditions for the Chattahoochee, Apalachicola and Flint River systems. We believe that it would desirable to create an interstate compact between Alabama, Florida, Georgia and to—which would promote and coordinate regional basin-wide water resource planning. We think it is important to create and fund a regional water resources planning commission. The commission should include representatives from the three states, as well as citizen representation. The commission would coordinate water use and water quality activities—monitoring and enforcement in the shared water basins.

Earlier—I believe an earlier comment was made that Atlanta has requirements for certainty in planning their growth. Well the natural systems say at Apalachicola Bay, they have—they have

less flexibility. The oysters that we have discussed so much, they need the certainty of water flows, timing, quality and quantity for their very survival, whereas human—the City of Atlanta and the metro area, there are options there that include conservation and other things that can help quite a bit.

There was a question or comment by the earlier speakers. I believe Congressman Grant asked this question about the ability of the corps to regulate discharges. For instance, if the Bay were ever in some critical situation where additional water was needed to come down the river. And I have knowledge of another river basin—it is the Cape Fear Hall River system in North Carolina. There is a B. Everett Jordan Dam there, and it is a newer dam and it has—it has features which the Seminole dam does not possess. But there is a program there where the industrial facilities at the mouth of the Cape Fear River—there are paper mills and chemical plants that require freshwater. And under drought conditions, you have salt water moving up in there. There is some sort of agreement between those industries and the corps that regulates the discharge of waters from the B. Everett Jordan Dam into the Cape Fear River system, which will maintain freshwater supplies for those industries. So at least, that is a precedent that I am familiar with in a different system. I do not know how relevant that is; but I just wanted to provide that comment to the Committee.

Thank you very much, and we are glad you are here.

Mr. NOWAK. Thank you.

Steve Leitman.

Mr. LEITMAN. Good afternoon, Mr. Chairman. My name is Steve Leitman, and I am the Apalachicola Basin Coordinator for the Florida Defenders of the Environment. Florida Defenders of the Environment is a private, non-profit organization that has been actively involved in the protection of Florida's natural resources for the past two decades. The primary focus of the organization is to bring objective facts into decisions which can affect the environment. I provide this testimony as someone who has had the honor and pleasure of spending the past 16 years working for state government, regional government and now a private environmental group in the Basin. I think that my dedication to the issue is shown in that I have come here as a Jewish person on Yom Kippur, choosing to spend the morning in testimony instead of in service, which I think is comparable to someone spending Easter Sunday in a hearing.

As my written testimony demonstrates, there has been a commitment from the state, regional and local perspective to protect the resources of the Basin. I think this commitment has been spoken loudly and clearly today. The river and bay play an important role to the culture and lifestyles of many people who live there.

As many earlier testimonies have also shown, it is flow to the Apalachicola River that makes the Apalachicola estuary productive. The river's influence on the estuary is related both to the timing and quantity of water delivered in to the quality of water. Since only 12½ percent of the Basin is in Florida, flow in the river is largely the result of rainfall, management actions and consumptive demands upstream in Alabama and Georgia. It is important

also to recognize that from Florida's perspective, the Chattahoochee and Flint are in the same drainage basin.

In reviewing the proposal to reallocate water in storage at Lake Lanier, my major concern has not been whether this one action in and of itself would make a difference. In the real world, actions such as the proposed reallocation do not happen by themselves. The proposed reallocation is merely one of many actions happening in the basin which can influence flow into Apalachicola Bay. The key question to me is, what is the cumulative effect of all of these actions in the Chattahoochee and Flint basins, especially during periods of extreme low flows. If this estuary is to be maintained for our children and our children's children, the allocation of freshwater throughout the basin must consider all these demands in context to each other and must accommodate for the timing and quantity of water needed by the estuary.

The FDE views the Lake Lanier proposal as a symptom of a much larger problem, the piecemeal management of water resources in the basin. I think that we have gotten a real good lesson from the Colorado Basin, of where this can lead us. The reallocation proposal and its resultant loss may provide us with what may very well be our last opportunity to do the right thing before it is too late.

FDE contends that if the State of Georgia and metropolitan Atlanta had given the attention warranted to meet the successful completion of that earlier memorandum of agreement in the earlier part of the 1980s, that the three states and the corps would probably not be in litigation at this time. FDE does not wish to impose economic hardship on any upstream users. However, we also do not intend to have hardships imposed on the ecological functioning of the estuary or upon Florida interests in the basin. We simply ask for the water resources of the basin to be managed in a comprehensive and responsible manner.

Our prescription to remedying the current impasse is straightforward. We want a guarantee, not a promise, that the historical flow regime will be maintained. We have seen too many broken promises in the past. We recognize that it may not always be possible to provide historic flows because of extreme climatic events. During these events, we would like to see all interests share the burden and to have a situation—and to not have the situation exacerbated by unrestrained consumptive demands.

FDE is willing to accept a negotiated agreement to the current situation only if such an agreement is detailed, specific and enforceable. Such an agreement should lead to an objective analysis of water needs, demands and supplies in the basin and result in its key findings being implemented into action. I want to make that clear. What we want is not a study; but we want a study to get information that will be used for managing the basin. Such an agreement should also point toward specific conservation programs for municipal, industrial and agricultural water users during low water periods. And such an agreement must establish a meaningful forum for communicating on basin-wide water management issues. FDE further supports the concept of Apalachicola Bay becoming an authorized project purpose insomuch as this authorization leads to the Bay actually being treated as an authorized project purpose.

The root of this problem is in our society's inability to appropriately value water. Our society has tended to look at water as a free good which can be consumed or polluted at will in order to generate profits. The FDE contends this perspective is wrong. Water, in fact, is the life blood of America and is of far greater value to our society than the paper we print up and call money. Considering all of the attention and money the State and the citizens of north Florida have spent on the protection of this estuary, it will indeed be a tragedy if this natural treasure still may not be allowed to continue to provide its bountiful treasures to future generations.

Thank you.

[The prepared statement of Mr. Leitman appears on p. 117.]

Mr. NOWAK. Thank you very much. Thank you all for your statements. You made some good points. When we were in Atlanta, the first half of hearing, we did receive testimony from the Mayor of Atlanta and other public officials to the high degree of everything from plumbing to reductions in days of use for watering grass and washing cars and so forth that they are either implementing or have implemented.

And in terms of water quality, they did—and there is testimony that they presented concerning the water quality discharges that are going to be associated with this interim allocation. And I would invite you to obtain copies of that as they go through. I, too, have a very strong belief that we take this resource for granted in water. Somebody made the statement the other day that whiskey is for drinking, but water is for fighting.

VOICE. Mark Twain.

Mr. NOWAK. Mark Twain said that a little earlier than we did. But it looks like all over the country, people are starting to realize, you know, the value of the water resource that they have been taking for granted for so long. And you look at the payment of water rates and consumption without metering is what I think your point was that if we do not put incentives into this water resource, if that water comes down here a little cloudy and starts to have an adverse effect, then the multi-million dollar industry that you have disappears. But it is not only that industry. It is looking out into the bay and perhaps the whole sport fishing, the whole ecology of the bay. The Gulf of Mexico starts to change. I mean, it is not incomprehensible to visualize that happening. It happened in the Great Lakes in the early 1960s when nobody paid any attention to this. The Water Resource Act, of course, that we are responsible for, and the Construction Grant Program, changing all of the primary treatment to secondary. Lifting that level has had great results, but we still do not really pay for the whole system use of water and the treatment of the water and the passing of that water on to that secondary resource.

But we hope that we can, you know, bring some of these things into the law and some day put some incentives if nothing else will work. And look at the pricing of oil and see how that drives down consumption. And we look at—in the 1970s that happened, and once the price of oil came back to $11 a barrel, the consumption, of course, went way, way back up. And we talked about putting incentives.

I was out in Scottsdale looking at their water resource problems last year. Scottsdale is a very fast-growing community, too. It is a mixed retirement home. Much that you are used to here in Florida, the transfer of people who are relocated, and they have gone so far with their water incentives that if you buy a home and you promise not to put a lawn in and keep it as a desert, you get a very heavy substantial tax break. And therefore, when you buy a home in certain developments out there—and these are large developments—I am talking 300 or 400—there is no grass. You have a little sidewalk, but there is no grass. And they claim tremendous savings over the life of, of course, 40–50 years, when you do not have to water the grass and other such uses like that.

So I think in not only the plumbing—look at what you pour on grass and realize—we had a meeting trying to determine what irrigation—you know, what we are putting—water, the freshwater that we get out of the Great Lakes or an aquifer into irrigation. You realize that we are producing surplus in some crops and corn. You know, one bushel of corn, supposedly—information that was given—one bushel of corn will take how many gallons of water? I asked this question at some of the meetings, and people would guess well, it would take, you know, 20 barrels—or 20 gallons. Other people would say no, it will take 40 gallons of water to grow a bushel of corn. Well, to grow a bushel of corn, it consumes 2,504 gallons of water. Should we at the one hand be pulling that water out for that use when you have got other perhaps higher uses to look at, and where do we conserve? But it is all, you know, coming to the forefront now.

We appreciate your testimony and your support for some of these incentives that hopefully, we will be able to move forward to have an overall effect.

Let me turn now to Congressman Stangeland.

Mr. STANGELAND. Thank you, Mr. Chairman. I have no questions. I want to commend this panel and commend you, Mr. Leitman. You are here at a great personal sacrifice. I hope that you feel your appearance here is worthwhile. I think it has been.

You know, Mr. Fuller and to the panel, you make a case for conservation. The Chairman has addressed that. I still think we have got a long way to go. And we are, as I said earlier, a society of waste. Everyone is at fault for taking for granted the fact that you walk into a hotel room and you put your glass under the tap and you drink water and think nothing of it. If you travel abroad, in most places, you do not do that. And, we just take for granted a resource that with which we were blessed.

During the time of the Arab oil embargo, I said that the next crisis in this country would be clean water supply—good water supply—adequate water supply. Well, we face both an energy crisis and an inadequate water supply crisis. Conservation has to be a part of the solution to our problem. No question about it.

And I thank you for your testimony.

Mr. NOWAK. Congressman Grant.

Mr. GRANT. Thank you, Mr. Chairman.

Steve, you have made some recommendations regarding a negotiated settlement, have you not? I would be interested in hearing

your vision for interstate—for governance of interstate water issues.

Mr. LEITMAN. How we should approach it? Okay, as Congressman Grant is aware and if anyone is interested, I wrote up a paper, in fact, on the previous agreement which went through why—we went through the agreement, what the agreement was about and looked at sort of eight years of how it was implemented. And I think it provides a lot of insight to what went wrong in the earlier agreement and which ways we should look at a future one. But, one of the keys——

Mr. GRANT. Can I interrupt just a second? Could we—can I ask, Mr. Chairman, can we include that in the record of our hearing? We will furnish the Committee a copy.

Mr. NOWAK. Without objection.

Mr. LEITMAN. Okay. One of the first things that I think the agreement needs to be, as I said, is that it needs to be enforceable. I do not think you can get into a situation with promises. But beyond that, too, I think that in setting up an agreement, I think it is important that instead of having just parties that are represented distantly, we need to define who are the key stakeholders. Who are the people that really have a lot tied to this. And I think that these people before we enter into an agreement really need to feel comfortable with it—need to feel like they are part of it, and it goes outside government. You have, you know, the interests around Apalachicola Bay. You have hydropower interests, you have a multitude of them in the Basin. And I think that if we are going to be successful in the long term that we need to have everyone involved and party to it.

Now the Corps of Engineers has come forward with some proposals for doing a conceptual study which, although I think it is a start, I think the thing we need to make clear to everyone is that it needs some refinement and polish. And part of the problem I saw with their study is they are proposing this one three-tiered approach. And one of the committees has 1,500 people on it. And I do not know how you would ever get a committee of 1,500 people to get anything done, let alone where they would meet.

Mr. GRANT. We have 535 in Washington, and we cannot——

[Laughter.]

Mr. LEITMAN. We need to find a balance of making sure that all interests have a say. But at the same time, not getting it so cumbersome that you cannot move forward.

I think that people need to feel like that they are committed. That they cannot just start into it and get what they want and leave because that was the problem with the rock trade. We took a big risk down in Florida, and I was one of the people, when I worked for Environmental Regulations, in negotiating that trade. And I felt it was very worth it because what we tried to do was change the perspective of water problems from the environment versus navigation, which was what it looked like before then to the real question is how do we manage water resources in this basin in a manner for everybody? And I still think that is the key question.

But I think that this time, when we enter into agreements and do studies, we need to make sure that we complete them and that, more importantly, that we work into it—how do we implement this

study? Because I would contend that we are better off guessing now and doing what we need to do than in doing the best study in the world and then setting it on the shelf because all you are doing is sacrificing the trees to print it. What we need is the study and the follow-up so that we can get towards good water management in the basin.

Mr. GRANT. Thank you.

Mr. NOWAK. All right. I want to thank the panel again, and we will move on to our next panel. Thank you very much.

We will go on to the next panel. We have Tri Rivers Water Development, Mr. Bill Sumption, who is Executive Director. He will be accompanied by Homer Hirt, who is the President, Tri Rivers Development—Waterways Development. And also, we will have the Atlanta Regional Commission, Dr. Pat Stevens; and Suwannee Valley Electric Cooperation, Dave Clark, who is Executive Director; and David Miller from Alabama Power. If you gentlemen will take the seats.

I believe it has been agreed that Homer Hirt will speak orally at this time. Mr. Hirt.

TESTIMONY OF HOMER HIRT, PRESIDENT, TRI RIVERS WATERWAY DEVELOPMENT; BILL SUMPTION, EXECUTIVE DIRECTOR, TRI RIVERS WATERWAY DEVELOPMENT; DR. PAT STEVENS, ATLANTA REGIONAL COMMISSION; DAVE CLARK, GENERAL MANAGER, SUWANNEE VALLEY ELECTRIC CORPORATION; DAVID MILLER, ALABAMA POWER CO; GRADY LEAVINS, PRESIDENT, LEAVINS SEAFOOD INC.; AND LEROY HALL, PRESIDENT, FRANKLIN COUNTY SEAFOOD WORKERS ASSOCIATION

Mr. HIRT. Thank you, Mr. Chairman. The reason I changed, I sign Bill's paycheck, so——

Mr. NOWAK. That makes you first.

Mr. HIRT. I would like to request that these comments and our statement be made part of the official record in this Committee.

Mr. NOWAK. Without objection, so ordered.

Mr. HIRT. Thank you, Chairman Nowak, Congressman Grant and other members of the Subcommittee for Water Resources, for this opportunity to present the needs of Apalachicola-Chattahoochee-Flint inland river system and waterway system. I particularly want to thank Mr. Grant for setting this up. We were afraid we would not have an opportunity to be heard. Many of us had conflicts yesterday, and we thank you for taking your time to come down here.

I am Homer B. Hirt, Jr. I was born in Chattahoochee, Florida on one side of Apalachicola River, and I now live five miles away in Sneed. I have traveled halfway around the world and came back here to reside and make my living. During recent years, I have been appointed Chairman of the Lake Seminole Advisory Committee. I operated a river terminal on the Apalachicola River for 15 years. And I am currently a transportation consultant, specifically in water transportation. However today, I am not wearing that hat because a consultant is someone with a briefcase 50 miles away. I am 45 miles away from home. I am immediate past President of the Tri Rivers Waterways Development Association and the Vice President for Florida for that organization. The primary objectives of our association are the effective development, utilization and maintenance of Apalachicola-Chattahoochee-Flint inland waterway

and river system to serve the needs of regional economic development and commercial navigation.

Our tri-state organization is, of course, also very interested in and strongly supportive of measures providing flood control, hydroelectric power generation, water quality, equitable water supply, drought management, recreation and wildlife enhancement. Our genuine support for these water resource purposes are further defined in our association bylaws. Principally, our perspective is focused on the equitable use of the ACF river system resources and services, a perspective which we feel your Committee has demonstrated excellent support for in the past. And I would like to add here that we feel that we are the ones that triggered this particular emphasis on this—the problem that we saw arising with the reallocation of the water. And we will get into that later.

We are most grateful for your interest concerning the proper analysis of the proposed reallocation of Lake Lanier. In light of the recent tri-state controversy concerning the additional and excessive demands desired to be placed upon the Chattahoochee River and Lake Lanier by the greater Atlanta area, we are here before you today with strong concerns. These concerns focus on ensuring that the authorized construction purposes of federal reservoirs on our river system will not be impacted further by efforts to receive special local support from the shared water resources serving the tri-state region, an area that encompasses over 19,800 square miles.

This issue is not a matter of Atlanta growing; but rather, a matter of Atlanta growing at the expense of others in the same river valley. For comparison, look west to Los Angeles, California and recall the destruction of the Owens Valley and the impacts on the other regions. And those are still going on there. You can look—I understand now Los Angeles is looking at Columbia River for a source of water. So, it is very alive there. It is with that memory and awareness of similar actions elsewhere that we question the wisdom of Atlanta's apparently selfish plan. Their proposed plan does not formally recognize the present and future growth needs of our other communities in the Chattahoochee, Flint or Apalachicola river valleys. The plan must be revised to recognize and allow for the needs of other local regions along the interstate river system. Let us not consider repeating the history lesson of Owens Valley.

Atlanta does have other water resource alternatives, but perhaps such options are simply not as inexpensive and convenient as consuming as much of the Chattahoochee River system as Atlanta area interests desire. Atlanta, though, can more readily afford additional infrastructure and water supply costs than the other, much smaller communities in our tri-state river basin area. This significant point should be recognized before we further stress Lake Lanier and the Chattahoochee River, particularly during periods of low flow and drought when the downstream interests are harmed the most. As well, the needs of those upstream of Atlanta have to be recognized and considered.

Mr. Chairman, you and your fellow Committee members have demonstrated a strong commitment to keep our nation's waterway systems as viable entities to the nation's economy. Through this sound commitment, you have strengthened our nation's economy

and the standard of living for many of our citizens. The citizens living in the ACF basin region of Alabama, Florida and Georgia have benefited and are grateful for your support and foresight.

We ask that the Congress of the United States reaffirm the long-term perspective that built the ACF inland waterway and river system. That concept, based on strong regional priorities and placed into federal law, best serves the broad interests of the 19,800 square mile river basin region. The original purposes of navigation, maximum hydropower production and flood control must be preserved to ensure substantial cost savings for area residents along the interstate river system, and I think Woody Miley pointed out that there is some compatibility there in navigation and hydropower needs with oyster production.

In closing, we are thankful for your commitment and for the knowledge that it will not waiver. We respectfully ask that your Subcommittee defer legislative actions concerning the proposed reallocation of Lake Lanier until the Corps of Engineers completes the comprehensive study and issues a more thorough and meaningful final report on the reallocation proposal.

I would like to again thank you for allowing me to testify today. We are appreciative of your continued leadership and diligence.

Mr. NOWAK. Thank you very much. We will now turn to Bill Sumption. Do you have an additional statement?

[Mr. Hirt's prepared statement appears on page 98.]

Mr. SUMPTION. Yes. The proposed reallocation of Lake Lanier is an extremely complex issue. We can study this from many perspectives. In the end, we have to consider the needs of all of those on this river system. The current proposal by the corps represents potential regional economic and ecological impacts beyond the walls of the greater Atlanta area. We acknowledge clearly that the answers to solving Atlanta's water needs beyond 1996 are not simple. In the same respect, the present and future needs of other local regions and communities along our river valley sharing a common resource have to be addressed in such a manner that when the proposal is presented to Congress to consider reallocation of the lake above the 50,000 acre foot limitation that the corps has authority to administer, that the other region needs are identified as well. To date, this has not been accomplished. We wonder why. Perhaps the answers to our questions are more critical than we care to realize.

I would like to bring to your attention that during the six public hearings concerning the corps—Corps of Engineers draft report issued in October of 1989, many subject areas were omitted or not covered in special detail. That was evident clearly from the responses up and down the basin, to include the meeting held in Atlanta. We have addressed such concerns in our report analysis, as have others throughout the tri-state region. What we have done, we have issued a report, provided it to the corps, and we have got about 400 copies—450 copies out elsewhere to include copies provided to Congressman Grant's office and other members of Congress. The Atlanta Regional Commission has, to my knowledge, at least three copies now. And we have not, to this date, had one party challenge any aspect of the comments in our report. We recommend a careful review of our analysis and for any members in your Committee, Chairman Nowak, and any members of this Congres-

sional hearing. If you want a copy of our full report, we will certainly provide it.

As Mr. Hirt explained, the final report must be more thorough. Only then can the Congress undertake the proper consideration of additional water diversions from Lake Lanier and the Chattahoochee River.

Let me jump to—if I may—to some of the comments made this morning. Perhaps I can provide you, Mr. Chairman, with some recent information that occurred in the last couple of days. There was reference made to utilizing the comprehensive study for the purpose of providing analysis of Apalachicola Bay needs. I caution you, sir, in recognizing that the funding provided by the Corps of Engineers at the direction of Congressman Bevill will not be sufficient to fund the development and use of a 3D model. That may, in fact, require additional funding of roughly an equivalent amount of money. And we need that. We recognize that. But under the current conceptual plan as developed by the Corps of Engineers and approved by Congressman Bevill, it is our view that certainly, that funding will not cover the 3D model.

We learned something this past year in studying the reallocation proposal, and that was that the Corps of Engineers had at its disposal computer data to demonstrate the percentage of channel availability for commercial navigation purposes that they provide in our river system. Our system has historically been plagued by low flows, and not necessarily low flows due to drought. But rather, a proprietary level of support provided to recreational users and perhaps other uses as well along the river system on the upper reaches. The corps' computer analysis through the Mobile District shows—and you can request that data from them, sir—that they can, in fact, provide 94 percent channel availability at a 9-foot draft level. That is almost as good as anybody in the country when you are talking navigation capability needs. If we were to receive that level of support, or even, let us say, 85 percent 9-foot draft availability, the needs of Apalachicola Bay would perhaps be taken care of. The water supply needs downstream, any augmentation support needs for water quality would be accommodated. The dilemma that we have today of managing this river system, foremost, the Corps of Engineers is very reluctant to take on an active role in accommodating water quality. That does not mean they, in fact, are being derelict in their duty performance. Rather, they depend on the State of Georgia to explain to them what the water quality needs on the Chattahoochee River.

About a year ago, I attended a corps drought meeting. During that meeting, the Corps of Engineers representatives, Mr. Ed Burkett and Mr. Bohannah of the Mobile district, attended. Mr. Bohannah turned to Mr. David Word, the representative from the Georgia Department of Natural Resources, and asked if the State of Georgia, in fact, would be requiring any additional releases to accommodate problems with dissolved oxygen. Without hesitation, Mr. Word quickly responded, "No." That is when we learned, in fact, that the State of Georgia drives the train totally on water quality from Buford Dam all the way down to Lake Seminole. It is with that thought in mind that I make you very much aware that as we move through consideration of reallocation, the Georgia per-

spective, representing the Atlanta and North Georgia interests, the focus clearly is not on water quality. We have a 750 CFS minimum established at Peachtree Creek in Atlanta, where the Chattahoochee River picks up the effluent discharge—discharge flows. That originally, back in 1962, when we proposed through House document Number 570, the construction of West Point Dam, was established at 1,300 CFS flow. We reduced it all the way down to 650, and finally, we have gotten it back up to 750.

Our organization, Tri Rivers, has, after having no success with Region 4 EPA, gone directly to EPA in Washington, challenging the 750 CFS minimum, and I am sure that will not make ARC happy, but that is too bad. We have challenged that, and we have asked them to take a very active role in the reallocation process. The Region 4 EPA office did not, in fact, comment on the corps' draft report, though they were specifically requested to do so. The person from the Mobile district that asked them to comment was a lady by the name of Diane Finley. And the region never commented—still has not. They have yet to respond to our letter concerning the 750 CFS flow, nor their lack of participation in addressing the corps' draft report.

Secondly, we again—after having a lack of success elsewhere with EPA—pursued with them their responsibility for ensuring that the natural estuarine on the Apalachicola would, in fact, suffer no harm through this reallocation process. After about three phone calls and after ending up with a gentleman by the name of Alvin Fox, we in fact, did verify that EPA has a functional responsibility to ensure that that estuarine would not be damaged. That estuarine, sir, can, in fact, be damaged through a reduction in flow.

The corps' PAC Report states that we will lose a five percent rate of return on treated wastewater flows. That, coupled with an intent by the State of Georgia to, in fact, hold us to the 750 minimum flow on the Chattahoochee River, ensures that we will lose substantial flows on this system. Presently, we receive an average—this is a rough average—of about 1100-1200 CFS, instead of 750. That is due to the production of hydropower, as well as some provision for navigation downstream. Once hydropower is bought out for the mere sum of sixty some million dollars, which quite frankly, is very cheap, and we restrict ourselves to the 750 minimum release, we are in trouble on flows.

Before we even address the issue of flows in the Apalachicola, we have to take a stronger look at West Point Lake. Right now—the corps has this information as well, but they may be reluctant to release it—we have records through the Corps of Engineers available to show that the releases from West Point Lake, in terms of looking at dissolved oxygen—releases up there—not all the times, but sometimes—are as low as one or less for a dissolved oxygen reading—one or less. You need at least four to keep fish alive. West Point Lake is a complete total disaster.

Last fall, I had a meeting with Commissioner Leonard Ledbetter, before he retired from the Georgia Department of Natural Resources, in a specific discussion regarding reallocation in West Point Lake. He, after some discussion, finally said, "Well, we just basically do not have any problems at West Point Lake." I challenge that. That is why, in fact, the pressure has been put on from

another fine organization, the Georgians for Clean Water, to pass legislation within the State of Georgia to ensure that the water quality impacts to West Point Lake are reduced. They cannot be reduced through a reallocation process when, in fact, the City of Atlanta and the greater Atlanta area wants to pull low water from storage, and yet, reduce flows coming downstream. It does not work. It is not acceptable, and it is not going to be acceptable to anybody in the basin from West Point on down.

I would like to bring a matter to your attention on a related matter. Before the Congress this year, Mr. Chairman, as I am sure you are aware, the Senate Water Resources bill, Senate Bill 2740, contained a section, section 308, which addressed water control plan management by the Corps of Engineers. In your version of the bill, sir, I believe it was section 17, we had a lot of activity on that subject. Specifically, for most, Major General Pat Kelly, along with a number of subordinates, raised specific objections as to section 308 in the Senate bill. Our organization interfaced with the office of the Corps of Engineers—more specifically with Mike Straub, their legislative man at the time—to understand what their problems were with the bill provision. We pursued that at length prior to forwarding a letter of support for the section to members of Congress, including yourself, you sir, as well as yourself, Mr. Grant.

Now the—I know you passed your bill this week, but it is an action that has occurred behind the scene just to demonstrate power and where we are—we have some awareness of political pressures. Senator Nunn, along with Senator Fowler forwarded a letter over to Senator Burdick. They have specifically requested that 308 be withdrawn from Senate Bill 2740, even though that bill in fact passed through the Senate. It is my understanding as late as last night that, in fact, that is going to occur. So whatever language you may have in section 17, I would say, sir, that that information is not going to be of any value until next year when we start all over.

The purpose of that section very clearly, for the benefit of our audience here, was to ensure that the Corps of Engineers is managing its projects consistent with its congressional authorization. That is, you have specific authorized project purposes for which these reservoirs were built. If you intend or have a desire in a region to make changes to that process, then we will have a process. In other words, we will use section 308 or section 17, and we will follow the—follow the rules. But the ultimate decision to make changes in provision of flows and storage from authorized project purposes shall rest with the Congress, not with the Corps of Engineers.

When the corps gets approval for a project, they have to come back to the Congress with a GDM, a general design memorandum. Unfortunately thereafter, they start modifying how they manage their flows, and we are experiencing this right now in our system. The Corps of Engineers does not have a formal water control plan approved by the South Atlantic Division of the Corps. Yet, they, in fact, are managing by such. While the plan may, in fact, be a worthy method of management, the plan has no approval, does not have a public process review and does not serve any more than a master plan update, like we are watching on the Missouri, have

any congressional review whatsoever. We deem those types of changes in operations to be highly improper and perhaps illegal, as well as inconsistent with authorizing legislation.

I make one more comment on that, if I may. And that is, Major General Kelly, Assistant Secretary of Army Ed Dickey, along with a number of subordinates actively campaigned to seek defeat of that provision. That is in—that is in complete violation of the Anti-Lobbying Act. I am not talking about opportunities where they spoke in testimony; but I am talking about communications out in the field—meetings at the Missouri River Commission, et cetera. The campaign was very active.

Two days ago, I had a direct communication in a meeting with Dr. Dickey on this point, and I asked him what specific authority do you, in fact, have to support or seek defeat of a bill or a provision thereof? This answer was provided to me in front of the Inland Rivers Ports and Terminals Organization. The answer was not good. He did not have a solid answer. His basic response was that the Anti-Lobbying Act was very vague. If the Anti-Lobbying Act is vague enough to allow the Corps of Engineers, without the approval of the Secretary of Defense or the Secretary of Army, to go out and actively campaign for or against bills or provisions thereof, then I recommend that we must correct that because I think it is highly improper that they can be doing the type of activities they have done in the last couple of months without the Secretary's approval.

And just for—just for the record, Major General Kelly was informed yesterday by myself that on our river system, we can, in fact, provide 94 percent channel availability.

I want to cover one more minor point. The rest of my information is in my written record. Another area where we have a problem in terms of how the corps is administering the project is that, in fact, the corps has authority to reallocate administratively pursuant to procedures developed under the Water Supply Act of 1958 15 percent, or 50,000 acre feet, of any given federal reservoir. At Lake Lanier, perhaps to your surprise, currently the Atlanta region is receiving benefit of 71,000 acre feet. If you, in fact, use the drought—the droughts of the 1980s to recalculate acre footage that would be used because that is where you get into what we call a critical yield analysis, they are, in fact, receiving benefit of 84,000 acre feet. That is 34,000 acre feet above the corps' authority to provide water supply for the Atlanta region. We would like to know why the Corps of Engineers is supporting Atlanta currently without seeking any support from the Congress. The rules are very clear, even in their own procedure. It is not information they want to give out, but it is there.

We are not opposed to Atlanta growing. But Atlanta certainly should be afforded no opportunity to grow at the expense of others in this river basin. We do not need another monster like Los Angeles. Once you have a monster, you have to keep feeding it. We know that.

Conservation measures Atlanta—that Atlanta could undertake—the other flows of waters on other river systems that they could pursue or even the aquifers in the State of Georgia that they could

reach out and tap are there. They do not need to further stress our river system. It is that simple.

Thank you, Mr. Chairman.

Mr. NOWAK. Thank you very much. We will now turn to Atlanta's Regional Commission, Dr. Pat Stevens.

Ms. STEVENS. Thank you for conferring a Doctorate degree on me; but for the record, I need to tell you, I do not have one. I have a Master's degree. I also ask that my oral comments be made part of the record and I ask permission to provide additional information during the time that you hold the record open.

Mr. NOWAK. Without objection, so ordered.

Ms. STEVENS. Thank you for the opportunity to address the Subcommittee. Atlanta's water supply is a very critical issue, and on it rests the economic viability of the Atlanta region and a good part of the State of Georgia. We believe that the best solution for our water supply is the reallocation of Lake Lanier on the Chattahoochee River. Today, I would like to tell you how we came to that conclusion, and I would also like to discuss with you the actions that we have taken, particularly for water conservation and water quality protection to ensure the other users of the ACF system that we do intend to be good neighbors in this basin.

Our region streams are generally small because it is located on a subcontinental divide. Most of our streams are very small because they start in our region. The exception is the Chattahoochee River. Ground water is also very limited since the region rests on crystalline rock like Stone Mountain granite, and the Chattahoochee River is the only major source of water supply available to the Atlanta region. Currently, we get 80 percent of our water from that system.

Lake Lanier was built in the 1950s under the leadership of the former Mayor of Atlanta and Senator Richard Russell, with the intent and expectation that it would be Atlanta's future water supply. The original document authorizing Buford Dam includes minimum releases for water supply, water quality for the Atlanta region, and further documentation supporting that authorization shows that increased off peak releases for the future of Atlanta region's water withdrawals was fully intended for the use of that project. We now need those additional releases and are ready to fully realize the visions of our former leaders.

Our efforts have a very long history. It began in 1973 when Congress authorized a study to develop a long-range water supply plan for the Atlanta region. Through the—actually, that was 1972. We started working in 1973. Through the study, over 50 alternatives were screened, including other water sources and various ways to manage the Chattahoochee River. In the late 1970s, the State of Georgia and the Atlanta region adopted water conservation measures and institutionalized low-flow plumbing fixtures in our state laws. In 1981, the study recommended that a reregulation dam be built below Buford Dam so that hydropower releases could be rereleased for water supply. That was seen as the best way to handle the situation at that time. In 1986, the reregulation dam was authorized by Congress. But during 1984 to 1988 detailed environmental and economic studies by the corps, this recommendation was reversed.

The corps' final recommendation is to change or reallocate a portion of Lake Lanier water storage—20 percent—from hydropower use to water supply use. In the fall of 1989, the corps presented the draft Post-Authorization Change Report at a series of public hearings. This report helped to focus many anti-Atlanta and anti-corps sentiments, a lot of which have nothing to do with the reallocation itself. Contrary to the concerns and perceptions of the public, the studies of the corps show that impacts from reallocation are minor and insignificant. The documents show that navigation impacts are minor, and there are no impacts to reallocation of Lake Lanier to fish and wildlife, including the Apalachicola Bay.

And I was curious about the Fish and Wildlife Service comments today, and I would like to read for you their draft planning aid on Post-Authorization Change Report that was in the PAC. And I will give this to the Committee if you would like to have that. "The stated purposes of the Lake Lanier Post-Authorization Change should not affect the resources—resource values of the basin; therefore, the Service favorably considers the Lake Lanier change." I would like to give that to you.

Mr. NOWAK. We will incorporate that as part of the record.

Ms. STEVENS. Reallocation should not impact water quality. The amount of water flowing will not change significantly due to reallocation, and Georgia law prohibits increasing the pounds of pollutants put into the stream below Atlanta, and water quality is expected to improve because state laws have also been passed to clean up the CSOs and to have additional phosphorus and toxic removals at our waste treatment plants. And I can tell you a little bit more about that.

Since most of the Atlanta region withdraws water from the system, what people do not know is that most of it does really go back into the system. Even—and it is a small percentage of the flow in the system—even with our 2010 water withdrawal, consumptive water losses due to the Atlanta region and average conditions are only five percent at the Fulton County line, which is right at the edge of the Atlanta region, and less than one percent of the average flow at the Florida state line. And the average flow in our—in our area is about 1.3 billion gallons of water. And by the time you—it empties into the Gulf of Mexico, it is 16 billion gallons of water, and so we are talking about less than one percent of that.

But really, the level of river flows in the Chattahoochee are determined more by weather conditions and rainfall in the rest of the basin and how the corps releases water from all these projects. They have five projects between the Atlanta area and the Gulf of Mexico. And in addition, there are about nine or ten private dams also.

The Atlanta region uses a very small percentage of water in the system, even during drought. So I guess the question is, why all the controversy? And our view of this is that it appears that the Atlanta region is getting caught in the crossfire between users who are concerned about how the corps makes releases from all the projects on the system. Recreation users want the lakes held high, even during droughts. Navigation and other users want the lakes dropped down. The corps gave focus to this controversy when they put a water control plan in the Post-Authorization Change Report,

and that water control plan designates how all these projects are controlled. Normally, that should be a separate docment from a reallocation report, but it is in the same document. And so, what happened is reallocation became the focus of a lot of this opposition.

We agree with the State of Florida's recommendations to the corps that that water control plan be separated from that document. We also support Florida's concerns about Apalachicola Bay and support a minimum flow to protect the Apalachicola Bay and think it should be required as part of the corps' water control plan for this region. The Apalachicola Bay is a valuable resource to the State of Florida and to the citizens of Georgia. When you go into a restaurant in Atlanta and they say on the menu that Apalachicola Bay oysters, that is something special.

In the fall of 1989, Representative Tom Bevill of Alabama used his influence over the corps to direct them to develop another study. I believe this was in response to many of the fears that we have heard about. This study is supposed to be a 2040 study of the Coosa and Chattahoochee River basins; but it appears to us that it is meant to restudy the reallocation of Lake Lanier.

We think that many of the concerns expressed by other users on the system could be handled through additional environmental work that the corps should be undertaking right now, but they are not. We think they could do additional weekly flow forecasting that would show that our use is not harmful. And what this study means to us is that 20 years of study are being ignored, and the economic stability of the Atlanta region is being jeopardized. And we agree that there needs to be a comprehensive study, and we want to take part. But we need some assurance that economic investments that we have counted on this water being available has put us in a terrible, terrible position. We think that a study should be an appropriate forum for mediating upstream and downstream controversy about how these projects are operated. And we need—we believe we need to develop a mechanism for long-term considerations and communication among all the users on the system because we think the main issue is minimum releases and how all these projects are operated all up and down the system.

The State of Georgia is on record supporting the reallocation of Lake Lanier and has urged the corps to move ahead with implementation. We will continue to support the State of Georgia's efforts to coordinate with the State of Alabama and the State of Florida, as long as those efforts recognize our long-range needs.

And as I mentioned before, I need to tell you a little bit about water conservation because we are only asking for what we need, and we do not think it is an excessive amount. Our citizens have shown commitment to water conservation. For example, in the drought of 1988, the Atlanta region comprehensively—all the counties, except for two—put into place some very strict water restrictions. There was no watering for most days during the week during certain hours, and you could only water every other day. I believe it is one of the strictest conservation measures that was put in place in the entire basin—Apalachicola-Chattahoochee-Flint basin—for many of these water utilities.

The State of Georgia has also done a lot, with the help of the Atlanta region, to do aspects of water conservation. We are one of only seven states in the entire country who have adopted requirements for what they call ultra low flow plumbing fixtures, and these are toilets that are about a gallon and a half flush, compared to the standard of three and a half gallon flush. And we hope that the states of Florida and Alabama will follow suit because the more states that do that, it drives what the plumbing manufacturers will make available to us, and it is better for everybody.

We have also done a lot with pricing schedules to promote water conservation in the Atlanta area. Unlike most of the country—areas of the country, the common rate structure in Atlanta is what is called the uniform rate. You pay a certain price per thousand, and no matter how much you use, so the more you use, the more you pay. This promotes water conservation. In addition, this year, the Atlanta Regional Commission is adopting a new policy which focuses on increasing type rate—the more you use, the more—even more you pay and excessive use surcharges to control any kind of excessive demands. And one of our models was Orange County, Florida, so we thank Florida for that idea.

We have also gotten good ideas from Florida on xeriscaping and have a very active program with the Georgia Extension Service and a group called Water Wise to promote xeriscaping in our region. And all the water utilities have water conservation education programs. And just last week, the City of Atlanta provided retrofit devices for toilets and dye tablets to every single one of its customers. Also, the state, for years, has had an industrial development policy that discourages heavy water-using industry from the Atlanta region. And so, if you look—compare our per capita uses to other places around the country, you can see they are very reasonable because heavy water-using industry has been told to go elsewhere.

We have also taken aggressive actions to clean up the water. I might just mention that we are 400 miles away from the Apalachicola Bay, and I think a lot of the water quality problems are not due to us, but maybe more to the agriculture and the dioxin problems that somebody mentioned earlier are from a paper plant in Alabama, not the Atlanta region.

But because we are an urban area—just like any urban area, we are the source of both point and what they call non-point source run-off pollution, storm water run-off. For controlling non-point source pollution, the Atlanta region has adopted watershed control measures, such as the Metropolitan River Protection Act, one of the few buffers—stream buffer protection acts probably in the whole United States. The state now has also required vegetative stream buffers on most streams for sediment and erosion control. And governments in the Atlanta region are also active in stream monitoring programs and are gearing up for the new EPA regulations to control the quality of storm water run-off. So we really believe the problems from non-point source run-off are going to improve.

For control of treatment plant discharges, the governments in the Atlanta region have spent nearly half a billion dollars in the last ten years to improve wastewater treatment plants. If you look

at the data from the late 1970s and early 1970s to now, the water quality in the Chattahoochee River has improved immensely. But it is not enough and we are doing more. To reduce phosphorus discharges, the use of phosphate detergent bans were banned—the use of phosphate detergents were banned in the Atlanta region in 1989, and it became a statewide policy in 1990. This alone has reduced the quantity of phosphorus discharge to the Chattahoochee River by 50 percent.

The State of Georgia has recently adopted revised water quality standards for toxic pollutants, which are some of the most stringent in the nation. Operating costs for our treatment plants are going to double and triple because of those requirements. But we are going to do it because we have a responsibility.

Finally, to correct the combined sewer overflows in the city, the Georgia General Assembly passed legislation, with the support of the Atlanta Region, to eliminate and treat all CSOs. The City of Atlanta had already been working on a plan to correct their CSO problem and intends to spend $60 million in the next two years to correct that problem.

So you can see, we have been working and planning for our water resources needs for many years. The region, the State of Georgia, the southeast and—with the Olympic decision a couple of weeks ago—the entire country has much to lose without an assured supply of water. If a permanent solution through reallocation is not put in place, growth will be curtailed. We are looking at an impact to the entire State of Georgia would stand to lose 680,000 jobs, $120 billion in wages and $8.2 billion in state revenues between now and the year 2010.

As negotiations continue between Georgia, Alabama and Florida and the Corps of Engineers, the Atlanta region's future is put on hold. The damage created by this dispute may be irreparable. I hope that all involved can work out our differences, and I hope we can put this problem behind us and that you will all join us in 1996 as Atlanta hosts the 100th anniversary of the Olympics.

[The prepared statement of Ms. Stevens appears on p. 132.]

Mr. NOWAK. Thank you very much for a very comprehensive statement.

Mr. Clark is next.

Mr. CLARK. Thank you, Mr. Chairman. Members of the Committee, Congressman Grant. I would like my remarks entered into the record.

Mr. NOWAK. Without objection, so ordered.

Mr. CLARK. My name is David Clark, and I am the General Manager of Suwannee Valley Electric Cooperative in Live Oak, Florida. I represent five other utility organizations which consist of three other electric cooperatives and two municipalities, all located in north Florida. Together, our six systems serve over 100,000 customers at retail. Since our group is small, being only six members, we do not have a formal organizational set-up, although I am speaking this morning on behalf of all six systems. These cooperatives and municipal systems purchase power from the Southeastern Power Administration—known as SEPA—the agency that markets power

produced by the agency's Florida project, known as the Jim Woodruff Dam, and operated by the U.S. Army Corps of Engineers.

Our group of six utilities, which utilize Southeastern Power from the Jim Woodruff Project, are well aware of controversy surrounding the use of waters from the Apalachicola-Chattahoochee-Flint Basin and also Lake Lanier. We full well understand the needs that have become important in recent years of these waters as potential sources for industrial and municipal water supply, including recreation.

These uses, however, were not contemplated by Congress when authorizing these projects. Power customers, such as those of our group, do not want to block these uses, which we recognize can provide important local benefits. We do, however, insist that these new users should shoulder their share of the burden, pay their own way and not enjoy benefits from projects whose costs have been shouldered all these years by rural and municipal electric customers. The Corps of Engineers must be required to seek meaningful public involvement in making decisions on project operations. In addition, they should also carefully observe the limits on management discretion imposed by Congress. We also fully support Congress' crucial role in formulating final decisions concerning project management which affect regional development have wide-ranging impacts. The corps should not be making these decisions.

Our small group is concerned with the proposed permanent reallocation of waters of Lake Lanier. The reallocation of waters was initially proposed by the Atlanta Regional Commission. We were not a party with the negotiations to reallocate a portion of Lake Lanier from hydropower generation to water supply. Those groups in Georgia and Alabama, to our knowledge, were the participants in these negotiations.

As we have learned, the negotiating parties agreed to a lump sum settlement as a means of fair compensation. The payment is intended to represent the cost of power that the cities and cooperatives in Georgia and Alabama must make up to replace lost hydropower generation at Buford Dam.

It is still apparent to us, however, being downstream from Lake Lanier and linked to this lake by the Chattahoochee River, that our group will lose hydropower generation at the Jim Woodruff Dam on Lake Seminole. We feel fairly much as the Georgia and Alabama groups do who are losing needed and valuable hydropower generation. That is, we should be properly compensated for any loss. The flows taken out of the Chattahoochee River as proposed by the Atlanta Regional Commission will directly affect us. Lake Seminole, which stores the head waters for the Jim Woodruff Dam, is of limited size and shallow depth, and this project generates energy in a pretty stable pattern. Any water taken out of the Chattahoochee or Flint Rivers, which feed Lake Seminole, directly affect hydropower generation and the cost incurred by the six participants in Florida for this SEPA project.

When a project such as the Jim Woodruff Dam was conceived, each project was authorized by Congress, based upon the corps' study of cost and benefits, usually finding that the benefits of a particular project's purposes exceeded project cost. When this finding was met, the corps constructed the projects and allocated cost

to project purposes, typically being navigation, flood control and power generation. Hydropower customers promised to purchase the power output and to repay all costs allocated to power in return for long-term access to this capacity and energy source. In a great many cases, power customers were the only beneficiaries who pay for the project investment.

We feel that if our benefits from these projects are to be reduced from their original determined purposes, then those who cause these benefit reductions should pay for their fair share of the project usage to compensate those who lose. We do not wish to cause a problem or a shortage of water resources for the residents of metro Atlanta. However, we do feel that reallocation of water from Lake Lanier for this particular purpose should not occur without a reassignment of cost responsibility and appropriate compensation for those adversely affected.

Let me give an example of cost responsibility. Our group has been recently notified by SEPA that a 100 percent rate increase will occur next February. Much of this increase has been attributed by SEPA to low production during low water flows of drought years. Surely, it is obvious that when needed waters are diverted to others during these years, available energy and capacity from the Woodruff Dam must be supplemented by SEPA to serve its contractual obligations to its customers. Always, this purchased supplement by SEPA is on the open market, and these costs are passed along to SEPA's customers through SEPA's rates.

We as customers of the Southeastern Power Administration are concerned that the group—excuse me—that the corps has permitted other user groups to gain free access to this valuable resource. In the past several years and in the face of drought situations, the corps has altered project management to accommodate recreation, which is not a purpose Congress intended to be considered in project operation. In the past, the corps has ignored Congressional project authorizations in making management changes to benefit recreation at the expense of the Federal Government's contractual users. In addition, downstream users are affected who have relied upon historical levels of releases to meet downstream water supply, including water quality and recreation needs.

The corps has come under increasing pressure to respond to these new competing uses—many of which are valid, but unauthorized. We believe Congress must remedy this situation and prescribe a fair principle and open decision-making process on the corps. We are willing to work actively to promote legislation that assures that all corps' decision, with respect to operations at federal projects, are made with the involvement of the public. These include responsible economic analysis, close attention to the original intent of Congress when authorized and a matching of cost and benefits.

Thank you, Mr. Chairman.

[The prepared statement of Mr. Clark appears on p. 72.]

Mr. NOWAK. Thank you very much, Mr. Clark.

We will now hear from David Miller from Alabama Power. Mr. Miller.

Mr. MILLER. Thank you, Mr. Chairman. I have submitted written comments to you. If you will accept them in the record, I will just summarize key points.

Mr. NOWAK. We certainly will without objection.

Mr. MILLER. Thank you. The Alabama Power Company is an investor-owned electric utility, serving citizens of Alabama, having approximately 10 million kilowatts of installed generating capacity, which includes 1.7 million kilowatts of nuclear capacity on the Chattahoochee River, as well as almost a million kilowatts of hydroelectric capacity on the Coosa River. This hearing this morning has centered and focused on Lake Lanier and the Chattahoochee River. However, the meeting notice did establish that the Alabama-Coosa River was part of this hearing. I hope I will make a few points that will be of benefit from that aspect.

On the Coosa River, the Army Corps of Engineers has proposed to reallocate water in storage for hydropower to water supply at the Allatoona and Carters projects. This reallocation of water will unquestionably reduce our generation at our hydroelectric plants downstream on the Coosa River and result in an increase in generation cost to Alabama Power Company. This ultimately will be reflected in the necessity to increase rates to the customers of Alabama Power Company. I would note that the President, President Bush, in his remarks on television the other night did promote the concept of increased hydroelectric generation as an alternative to our reliance on fuels from the Middle East, and this is contrary to that intent.

We take a technical issue with the corps in the manner in which they compute the usable storage for reallocation to water supply. They include storage contained in the flood control zone in their storage projects. They do this at Lake Lanier, Lake Allatoona and Carters in their computational procedure. Water contained in a flood control zone is not available for water supply. It is only stored there temporarily during high flow, and at the time of the firm water supply, which is normally in the summer and the fall of the year, that water is not there. And the—to include that in the computational procedure, in our opinion, results in an inflated figure available for reallocation. So we have a technical issue—dispute in that regard.

We pay substantial money to the Federal Government through the Federal Energy Regulatory Commission under the Federal Power Act in terms of what is referred to as head water benefits. These payments are made reflecting the benefits that Allatoona and Carters projects provide in terms of increased generation to our downstream hydroelectric projects. The procedure that the corps has followed in the reallocation evaluation of Carters and Allatoona has not reflected inclusion of this procedure. And unless it does, it will result in a disappropriate increase in cost that we would be required to pay that is—that should be taken out of the head water benefits procedure. So this is a licensing matter that we have brought before the corps. and it has not been addressed in the head water benefit, so—excuse me—in the reallocation procedure.

Also, we are required by our licenses to meet minimum flow requirements out of the Coosa River and support navigation on the Alabama River, and the full reallocation study of Allatoona and Carters Dams has not looked at the impact of our ability to maintain minimum flows for navigation as we are presently required. Navigation on the Alabama River was impacted during both 1986

and 1988, during the drought conditions because there was insufficient storage upstream to guarantee that that navigation could be supported. So, to again reallocate water in Carters and Allatoona to water supply without looking at the potential impacts to navigation is a serious omission.

Switching to the Chattahoochee River for a moment. We operate the Farley Nuclear Plant located near Dothan on that river. It requires a dependable source of water for cooling water and other plant water needs. During the droughts of 1986 and 1988, the low flow conditions and low elevations in the river did cause problems at that plant with flotation in the intake, and we are concerned in that, again, the reallocation process of Lake Lanier has not specifically reflected the needs of the present and future operation of the Farley Nuclear Plant.

So in summary here, I tried to point out some key concerns that we have that simply say the studies conducted to date have not included these important downstream impacts that I have summarized. Thank you.

[The prepared statement of Mr. Miller appears on p. 127.]

Mr. NOWAK. Thank you very much. We have—as illustrated by this panel—other concerns—environmental concerns that were expressed earlier. And of course, we have the seafood industry that we will hear from next. And it has become somewhat evident that there are a broad group and range of interests from the hydropower people, of course, who are looking for some type of reimbursement. And, what would you like to see from Atlanta who is going to take all this water and you will not be able to produce hydro, or from the navigation people who will not be able to pull their barges up to Columbus?

Mr. CLARK. I would not want an reimbursement. I want the water, you know. I am happy the way it is.

Mr. NOWAK. Well, if they do take the water and that becomes a reality, do you want the reimbursement for your increased cost production of power or replacement power?

Mr. CLARK. Yes. We should be reimbursed on a—I believe there was a deal worked out with the Georgia and Alabama groups—I think it has come apart since then—for a sum of sixty some million dollars that represents the increase purchase on the open market to acquire replacement power for the lost hydropower generation. We, of course, would expect to be part of that because our options go in that regard, and six Florida participants from the Woodruff Dam lose substantial portion.

Mr. NOWAK. Well, let me just turn to Arlan Stangeland.

Mr. STANGELAND. Thank you, Mr. Chairman. I want to thank this panel very much. Just one question, Ms. Stevens. I have perused your statement and it is very comprehensive and broad-ranging. On page 5, you discussed the average conditions of the Chattahoochee's flow in the year 2020 and its reduction as a result of the withdrawals by the Atlanta region from Lanier and from the Chattahoochee River. Are those corps' figures?

Ms. STEVENS. What we did was we got stream gauge readings from the U.S. Geological Survey for the period of record for all the stream gauges and looked at the average flow. Also, we looked at what happened in the gauge and just superimposed our demands

on that stream flow to give us a picture of what percent our use was.

Mr. STANGELAND. I think it was your testimony in this area that heightens the need for a comprehensive study by the corps as part of the minimum low flows required to maintain something like the Apalachicola because the figures you give would appear, at least on the surface, to be minimal impact to at least the Apalachicola Basin—Bay. When you talk about reducing down so that the flow of reduction would be less than one percent where the water enters the Apalachicola Bay. What does one percent mean in maintaining the Bay?

Ms. STEVENS. And I think what the issue really is, it is not our use as much as what kind of releases are made from all these projects because we return most of our water we use, and you know, this kind of a difference—less than one percent of the Gulf of Mexico can be handled by a minimum release like Florida wants for their project.

Mr. STANGELAND. I think this dramatizes the need for a better study to assure all users of the impacts and potential effects and then, of course, the impact beyond the year 2010 and where Atlanta goes at that time for water because there would be a limited amount they could withdraw.

Ms. STEVENS. Just in response to that, in our perspective, we see that the—we believe the impacts to be very minor, and we are concerned about a very lengthy study when the facts already show the impacts are minor. And even though we would like to assure all these users and we would like to part of a long-range study, when you build a water treatment plant, you have got to buy 30-year bonds. And we are concerned about the investments we have already made getting paid back. So we would—we would hope that the corps to address these questions in the environmental work that they should be doing following up to all of these comments that were brought up in the draft report and answer them in the final report that they should put out.

Mr. STANGELAND. Well, I think that is a question we have to ask the corps as well as to the length of time of study. I do not think we should allow them to study and study and study until, as we say in Washington, "The money is all gone." There seems to be no reason why they cannot come back with a responsible answer to all of the parties concerned in a reasonably short of period of time—within, I would expect, two years.

Mr. SUMPTION. Sir, can I comment on that very briefly?

Mr. STANGELAND. Go ahead.

Mr. SUMPTION. The—once we can get the Corps of Engineers to actually use the droughts of the 1980s, specifically the 1981 drought as the drought of record as it now is. When you go back and recalculate this little bit of storage that the Atlanta area wants, that little bit of storage equates in the following manner: full pool elevation at Lanier is 10,071. The bottom of the conservation pool is 10,035. Just in providing support for the Atlanta region at the 529 million gallon per day average figure—not a peak analysis, but rather, an average consumption of 529. Through the corps' own computer analysis, they pull that reservoir down to 10,045.51. That is just water supply for Atlanta. We could not pull Lake

Lanier down below 10,052 during our most severe drought in the 1980s. So, if you are going to build federal reservoirs and you are going to have conservation storage and dead storage, if we could not have access to is during a drought, why now, do we, in fact, give the bulk of the storage to Atlanta for water supply and literally tell the downstream users, "You have lost the availability of 65 percent of your system storage," which was built as a part of a system.

Mr. STANGELAND. But I also understand—maybe I am mixing apples and oranges here—but I also understand the corps has the authority to bring it down to 10,035, and it has never ever done that.

Mr. SUMPTION. That is correct, sir. But, the political pressures in the Atlanta region are significant. As an example—I will be quiet in a moment—as an example, Governor Harris and the Atlanta Regional Commission voiced specific objections to the Water Control Plan provisions of the House bill that was moving forward, as well as legal letters—and I have got those letters in my car. Specific objections to section 308. And obviously, they did that because they joined the band wagon to go attack Senator Nunn and get him to react and ask Senator Burdick to withdraw 308.

Now, one of the comments they made in there concerning section 308 was they were concerned as well that in addition to buying hydropower, they might have to buy out navigation. And obviously, that will be the case, and if the navigation users—if reallocation is ultimately approved at the levels that Atlanta desires—obviously, we are headed to Federal court. There has been no attempt on the part of the ARC or the State of Georgia in their negotiations with the other states and the corps, to our knowledge, to reduce their demands. In proposed legislation, Senator Nunn—they did not ask for 529 million gallons a day. They asked 533. This happened last year. Why do they not come back to reregulation of 484 and offer the states of Florida and Alabama some latitude in negotiating? Why is there not some effort to bring about a reasonable solution, instead of continuing the phenomenal water war? This financing has not even got hot.

Mr. NOWAK. But it may. Congressman Grant.

Mr. GRANT. I think you are right. I think it is going to—and really points out to me that we have poorly defined inadequate method of dealing with these interstate water squabbles. We obviously disagree even on the so-called factual information. If I understand you—the two of you right, you just disagreed with the corps' analysis. I think, Ms. Stevens, you said that you agree with it basically and that you think the impact is minor, and you think the impact is major. Those of us downstream have a different view of it. But we—and we do not have a way now to work it out, except in court, and I think it points up to us we have got to do something and do it very, very rapidly, not only to resolve this situation, but to deal with those that are coming.

In the interest of time, Mr. Chairman, I will not ask more questions. I have been informed by a very isolated and lonely University of Florida fan that their football game began at 12:30. Of course, I was not aware of that, and I will not ask more questions.

Mr. NOWAK. We will thank the panel. And again, just a reminder, keep this record as we go forward. Thank you for your appearance.

We will bring together our next panel, and panel IV—VI is Roger Newton, who is the owner of Bayside Shellfish; Grady Leavins, who is the owner of Leavins Seafood; and Leroy Hall, who is the President of Seafood Workers Association. You gentlemen come forward. We are happy to receive your testimony.

Mr. Newton, would you like to start first?

Mr. GRANT. He is not here.

Mr. NOWAK. We are missing Mr. Newton. Is he here?

Mr. GRANT. I do not think he is here, Mr. Chairman.

Mr. NOWAK. Okay, then we will go down to Mr. Leavins.

Mr. LEAVINS. Thank you, Mr. Chairman. My name is Grady Leavins, President of Leavins Seafood, Inc., based in Apalachicola. Leavins Seafood, Inc. currently employs 40 people—in addition to that, probably 30 oyster fishermen. Our customer base is approximately 150 throughout the southeastern United States. We deal primarily in halfshell oysters and shucked oysters. Incidentally, Atlanta is one area of our—that we sell a lot of product in also. I am the oyster—I am Director of Southeastern Fisheries Association, a trade association based here in Tallahassee. I am also the Oyster and Clam Section Chairman for Southeastern Fisheries.

Apalachicola Bay is known as one of the world's most productive in terms of oyster production. Attached to my testimony, there is a chart prepared by the National Oceanic and Atmospheric Administration that illustrates oyster meat landings from various oyster-producing estuaries in the Gulf of Mexico. Please note that Apalachicola Bay ranks 13th in acreage, but is second in production for the year 1984. For the 115,000 acres of Apalachicola Bay, approximately 40 percent, or 46,000 acres, are suitable for growing oysters. The last figures I saw estimated oyster beds that covered 6,000 acres to public bars and about 600 in private leases. These oyster beds produce about 90 percent of Florida's total oyster production.

Mr. STANGELAND. Excuse me. I would have loved to have tasted an Apalachicola oyster.

Mr. LEAVINS. For those of you who have not, you have missed a delicacy. You can rest assured of that.

We in Franklin County have prided ourselves in protecting this great resource to preserve the water quality because oysters are filter feeders. Therefore, water quality is essential. Just as vital as water quality is water quantity. The next graph shows the correlation between the flow rates of the Apalachicola River and oyster production in the Bay. I am not a scientist, but I can see the decrease in flow rates is relative to decrease in oyster production.

The flow rates in Apalachicola Bay are vital to oysters because oysters feed on nutrients in freshwater. Typically, an Apalachicola oyster grows from a juvenile spat to a marketable 3-inch oyster in about 18 months, and sometimes much more quickly than that, depending on the area. My good friend, Bob Ingle, has done a great deal of research on oysters in Apalachicola Bay, has recorded oysters maturing as early as 14 months.

I would like to show you something to support the growth rates, which is this clump of juvenile oysters in Apalachicola Bay from

my leased beds from the state. In the past two and a half years, I probably put between 3,000 and 5,000 cubic yards of shell. This clump of oysters has from 13–15 oysters on one oyster shell. You can imagine how many shells would be in 3,000–5,000 cubic yards. This came directly after the large flood that flooded so many Alabamans and Georgia. So that will support my theory that a flush of fresh oyster—freshwater causes oysters to spawn and then contributes to a great deal of oyster productivity in Apalachicola Bay.

I started as an oyster fisherman 18–20 years ago. I moved from Panama City to Apalachicola Bay because I liked what I could do there was to pursue private enterprise. There is one oyster bed there that is almost virtually non-productive now. That is St. Vincent oyster bed, which St. Vincent's Island is a federal reserve. It comes off from the island and runs parallel to it. Fifteen, 18, 20 years ago when I started there, there was three of us—fishermen on one boat that could start to work right after daylight, and by 1:00 or 2:00 in the afternoon, have 60 bushels of oysters aboard a vessel and go in to sell them. St. Vincent oyster bed now is virtually non-productive.

But to the east in Apalachicola Bay, we have East Hole oyster bed and Cat Point oyster bed. Several years ago when I got involved in it, hardly anyone worked Cat Point or East Hole because the quality of St. Vincent oyster was far superior to that. Now those oyster beds are the mainstay of the folks in Franklin County. It may be too late for St. Vincent's. It is not too late for East Hole or Cat Point and the surviving oyster beds in Apalachicola Bay. I think that the quantity of water that flows down the Apalachicola River is just as important to the livelihood of the people there as it is important to those folks in Atlanta area, Georgia and Alabama. So if I were in a position to make a decision about what happens to the water there, naturally, I would say send it all to us. But, everyone has to live. Why not—why could not there be a reservoir constructed to manage Apalachicola Bay? Apalachicola Bay is the most managed bay in the State of Florida and managed by the Floridians. If it could be possible to have a reservoir to create the synthetic floods to flush the nutrients down, then everybody could live. And that would be a complete answer to a very difficult situation.

Gentlemen, I thank you.

[The prepared statement of Mr. Leavins appears on p. 113.]

Mr. NOWAK. Thank you very much.

Mr. Hall.

Mr. HALL. Yes, sir. Thank you all for allowing me to come this morning—this afternoon now—to speak to you gentlemen, Mr. Chairman and the Committee. My name is Leroy Hall. I am the President of Franklin County Seafood Workers Association. And of course, we represent some other surrounding counties also.

Our organization is very concerned with any plans to reallocate water without consideration being given to the downstream users of our seafood industry relies upon the productive Apalachicola Bay. When the river levels are down and there is not enough fresh-

water, our oysters die. Shrimps, crabs and all types of fish breed in the Apalachicola Bay estuary system. It is vital that the need for the freshwater for Apalachicola Bay be given consideration at the time water is to be reallocated.

Our Association has committed $5,000, along with the county also contributing $5,000 from the local County Commissioners toward a freshwater needs study being conducted by the Northwest Water Management District. Also, the SWIM is involved. We are committed to work with the state and federal agents to compute the need for freshwater for our rivers and bay system.

The seafood industry supports at least 80 percent of the people in Franklin County. When our seasons are good, everyone prospers. But when our seasons are bad, everyone suffers. We must sufficient—have sufficient water to keep the Bay productive.

It is the recommendation of the Franklin County Seafood Workers Association for the need of all the water use to be taken into consideration before any reallocation of water is planned. We have our seafood industry on which we depend. But likewise, we have considerable barge traffic and aquaculture and all other use of water system.

On behalf of the Seafood Workers Association of Franklin County, I respectfully request that water resources be managed on a basin-wide plan and not some piecemeal plan which would not give due consideration to all on the use of seafood.

Mr. NOWAK. Thank you very much. We—as you have been listening to the other witnesses, you can see the somewhat complex nature of this whole process and the whole impact upon your industry, as well as the others that were talked about here today.

And I think you made a good point, Mr. Leavins, when you talked about trying to share this resource and doing it in a way that has the greatest and widest benefits for all who are using it. And you do not take and impose upon anyone a total destruction or loss. And your impacts received on freshwater, of course, are going to be a very important point in the negotiation now that it is in—out of court temporarily while the stay is imposed. I would hope that we would bring your issues, and you can do that certainly through the State of Florida who you receive some support from the other community leaders that testified. But, there is nothing like, you know, creating that job for somebody. When they go to work, all the other problems of an area seem to disappear if "people are working." And if they are not, it is a monumental social kind of problem.

But, we appreciate your testimony, and I think we realize the impacts on that industry and we know that all through the country—Louisiana and certainly, the Chesapeake—there have been reductions because of pollution and all kinds of other problems. And it is nice to see you not only in the business, but in the forefront of representing your industry on different levels of conscience.

Let me go right to Mr. Stangeland.

Mr. STANGELAND. I thank you, Mr. Chairman. Thank you, Mr. Leavins and Mr. Hall. Let me say we do appreciate your testimony. I have to tell you that when the hearing was first requested for Atlanta and Congressman Grant got wind of it, he came to me and he said—the first concern that he expressed was Apalachicola Bay

and the oyster and seafood industry. And, I want you to be aware of that. At that time, I told Congressman Grant that I thought there was no reason in the world why we could not make a two-day hearing and then let his side be heard from down here, as well as the Atlanta side up there. So that is why we are here, we are here at his request.

Mr. HALL. Well, I really respect the fact that you moved from Washington to Tallahassee for us.

Mr. STANGELAND. Well, a lot of us would like to move it a whole lot of other places than Washington. But we do think that you have come in with some responsible testimony and have dramatized the impact it can have from one who is right there on the scene and whose livelihood depends on this. And that is important. Too often, I think we fail to see the full picture when we sit in Washington of the impacts on the things that we do on the little people. We see a big picture; but we do not see that small picture on the bottom. And for you and Mr. Hall, I appreciate your being here. Thank you.

Mr. LEAVINS. Thank you.

Mr. HALL. I would like to say one thing. Someone asked awhile ago how old Apalachicola Bay was. Well, we know that the Indians used to get oysters out of Apalachicola Bay, so we know it has been around that long. As far as the reallocation of the water making an impact on the Apalachicola Bay, I think it would be a tremendous—make a tremendous disadvantage by having it reallocated. I heard someone say awhile ago that they did not think it would. But we know that it would since we have went through droughts and we have saw what has happened to our Bay for just lack of freshwater. So we know what it does to it. I—we think there should be a study definitely done on this before there is even any consideration of any allocation. NorthwestFlorida and the SWIM is in the process of making a two- or four-year study right now. And we definitely think that we need something to be did before any consideration of reallocating our water.

Mr. NOWAK. Congressman Grant.

Mr. GRANT. I will be brief, Mr. Chairman.

I want to tell you, Grady, that I will make a request to the court to at least review your suggestion about the reservoir. That has not come up before.

Mr. LEAVINS. It would solve a lot of problems.

Mr. GRANT. I frankly had not thought about it. And I do want to say, too, for the record that these people are not down here for looking for some way to get out of work. They are looking for work. And Grady, I have been to your place and seen the project that you are trying to start to save the oyster industry if we cannot get help any other way. And I applaud you for what you are doing there. I think it is great work.

Mr. Chairman, I want to thank you and Mr. Stangeland for your time for bringing the committee to my home. It is important to me that we have the Congress hear our side of the issue as well, and I think that it has been fairly stated—points up to me that we do need some overall changes in the way that we conduct our interstate water policy. And I look forward to working with you under your leadership in years to come to do that. Thank you.

Mr. NOWAK. Well, we have to get re-elected first. But, assuming that, we will go back to our respective districts. We really take with us a flavor of this community and, of course, of the problems. And the record that is being kept will be distributed and available to other members of the subcommittee. I am sure when related legislation comes before us and we have related legislation pending, you know, in section 16 of the water bill today sitting before us to be considered as soon as we go back on Monday. So, we do have a vital interest in this, and we were happy to accommodate Mr. Grant because he showed the type of concern that I would hope every member in Congress would have.

This meeting will stand adjourned.

[Whereupon, at 1:25 p.m., the Subcommittee was adjourned.]

PREPARED STATEMENT OF WITNESSES

WRITTEN STATEMENT BY DAVID R. CLARK

FOR THE RECORD

COMMITTEE ON PUBLIC WORKS AND TRANSPORTATION

SUB-COMMITTEE ON WATER RESOURCES

FIELD HEARING - TALLAHASSEE, FLORIDA

SEPTEMBER 29, 1990

My name is David Clark and I am General Manager of Suwannee Valley Electric Cooperative, Inc. in Live Oak, Florida. I represent five (5) other utility organizations which consist of three other electric cooperatives and two municipalities all of which are located in North Florida. Together our six systems serve over 100,000 customers at retail. Since our group is small, being only six members, we do not have a formal organizational setup although I am speaking this morning on behalf of all six systems. These cooperatives and municipal systems purchase power from the Southeastern Power Administration (SEPA), the agency that markets power produced by the agency's Florida project known as the Jim Woodruff Dam and operated by the U.S. Army Corps of Engineers.

OVERVIEW:

Our group of six utilities which utilize Southeastern Power from the Jim Woodruff Project are well aware of controversy surrounding the use of waters from the Apalachacola-Chatahoochee-Flint (ACF) Basin and also Lake Lanier. We full well understand the needs that have become important in recent years of these waters as potential sources for industrial and municipal water supply, including

recreation. These uses, however, were not contemplated by Congress when authorizing these projects. Power customers, such as those of our group, do not want to block these uses, which we recognize can provide important local benefits. We do, however, insist that these new users should shoulder their share of the burden and pay their own way and not enjoy benefits from projects whose cost have been shouldered all these years by rural and municipal electric consumers. The Corps of Engineers must be required to seek meaningful public involvement in making decisions on project operations. In addition, they should also carefully observe the limits on management discretion imposed by Congress. We also fully support Congress's crucial role in formulating final decisions concerning project management which effect regional development and have wide ranging impacts. The Corps should not be making these decisions.

REALLOCATIONS

Our small group is concerned with the proposed permanent reallocation of waters of Lake Lanier. The reallocation of waters was initially proposed by the Atlanta Regional Commission (ARC). We were not a party with the negotiations to reallocate a portion of Lake Lanier from hydro-power generation to water supply. Those groups in Georgia and Alabama, to our knowledge, were the participants in these negotiations.

As we have learned, the negotiating parties agreed to a lump-sum settlement as a means of fair compensation. The payment is intended to represent the cost of power that the cities and

cooperatives in Georgia and Alabama must make up to replace lost hydropower generation at Buford Dam.

It is still apparent to us, however, being downstream from Lake Lanier and linked to this lake by the Chatahoochee River, that our group will lose hydropower generation at the Jim Woodruff Dam on Lake Seminole. We feel fairly much as the Georgia and Alabama groups do who are losing needed and valuable hydropower generation. That is, we should be properly compensated for any loss. The flows taken out of the Chatahoochee River as proposed by the Atlanta Regional Commission will directly effect us. Lake Seminole, which stores the headwaters for the Jim Woodruff Dam is of limited size and shallow depth and this project generates energy in a pretty stable pattern. Any water taken out of the Chatahoochee or Flint Rivers, which feed Lake Seminole, directly affect hydropower generation and the cost incurred by the six participants in Florida for this SEPA project.

When a project such as the Jim Woodruff project was conceived, each project was authorized by Congress, based upon the Corp's study of cost and benefits, usually finding that the benefits of a particular projects purposes exceeded project cost. When this finding was met, the Corps constructed the projects and allocated cost to project purposes typically being navigation, flood control, and power generation. Hydropower customers promised to purchase the power output and to repay all cost allocated to power, in return, for long-term access to this capacity and energy source.

In a great many cases, power customers were the only beneficiaries who pay for the project investment.

We feel that if our benefits from these projects are to be reduced from their original determined purposes, then those who cause these benefit reductions should pay for their fair share of the project usage and compensate those who lose. We do not wish to cause a problem or a shortage of water resources for the residents of metro Atlanta, however, we do feel that reallocation of water from Lake Lanier for this particular purpose should not occur without a reassignment of cost responsibility and appropriate compensation for those adversely affected.

Let me give an example of cost responsibility. Our group has recently been notified by SEPA of a 100% rate increase next February. Much of this increase has been attributed by SEPA to low production during low water flows of drought years. Surely it is obvious that when needed waters are diverted to others during these years, available energy and capacity from the Woodruff Dam must be supplemented by SEPA to serve its contractual obligations to its customers. Always this purchased supplement by SEPA is on the open market and these costs are passed along to SEPA's customers through SEPA's rates.

PROCEDURAL LEGISLATION

We as customers of the Southeastern Power Administration are concerned that the Corps has permitted other user groups to gain free access to this valuable resource. In the past several years,

and in face of drought situations, the Corps has altered project management to accommodate recreation, which is not a purpose Congress intended to be considered in project operation. In the past, the Corps has ignored congressional project authorizations in making management changes to benefit recreation, at the expense of the Federal government's contractual users. In addition, downstream users are affected who have relied upon historical levels of releases to meet downstream water supply, including water quality and recreation needs.

The Corps has come under increasing pressure to respond to these new competing uses many of which are valid, but unauthorized. We believe Congress must remedy this situation and prescribe a fair principle and open decision making process on the Corps. We are willing to work actively to promote legislation that assures that all Corps decisions, with respect to operations at Federal projects, are made with the involvement of the public. These include responsible economic analysis, close attention to the original intent of Congress when authorized, and a matching of cost and benefits.

RESPECTFULLY SUBMITTED

David R. Clark

TESTIMONY OF THE HONORABLE ROBERT A. BUTTERWORTH
ATTORNEY GENERAL OF THE STATE OF FLORIDA
DOWN STREAM IMPACTS OF WATER SUPPLY ALLOCATION AND
MANAGEMENT ALONG THE APALACHICOLA-CHATTAHOOCHEE-FLINT
RIVER BASIN BEFORE THE SUBCOMMITTEE ON WATER RESOURCES
OF THE COMMITTEE ON PUBLIC WORKS AND TRANSPORTATION
UNITED STATES HOUSE OF REPRESENTATIVES

Good morning Mr. Chairman and members of the Committee.

I appreciate the opportunity to appear before this subcommittee and discuss the implications of the pending federal lawsuit governing the allocations of water resources along the Apalachicola-Chattahoochee-Flint River Basin.

I have provided, as an addendum to my testimony to the subcommittee, the status of the pending litigation in the Northern District of Alabama, in which Florida seeks to intervene and assert Florida's interests regarding the validity of the Corps' reallocation of water resources and changes to the water control plan. The history and status of this lawsuit are outlined in detail as a part of the State of Florida's report by the Coastal Resources Interagency Management Committee, and I will not detail that further. However, the State of Florida, through the auspices of the Office of the Attorney General, will continue to pursue any legal remedies necessary to assert and maintain Florida's interests in the management of the Apalachicola River which is of vital importance to the people of the State of Florida.

My office will continue to participate in negotiations with the Corps and the other parties to this litigation, and it is hoped that we can reach an amicable settlement of these concerns. It should be emphasized that Florida's concerns over the Corps' proposed reallocation are of vital concern to the Office of the Attorney General, and the office will continue to participate fully in both the litigation and in any discussions and negotiations concerning this issue.

In context with these remarks, I would like to express to this committee our reasons for having joined this lawsuit and to suggest to this committee at least three areas in which this committee can be of valuable service in helping to resolve this controversy.

As a member of the Florida Cabinet, I have had many opportunities to review and to learn about the water resources of the Apalachicola Bay and the protection it needs. The federal government has designated Apalachicola Bay as a National Estuarine Research Reserve and an International Bioshpere Reserve. The Florida Legislature has designated Apalachicola as an Area Of Critical State Concern since 1985. That designation, by its very nature, carries with it a recognition by the Florida Legislature, that the Apalachicola Bay is a unique resource in need of special regulatory activity as well as greater protection from development and intrusion into the natural resources. Such protection comes in various forms.

In conjunction with this area of critical state concern designation, the State of Florida has spent millions of dollars in constructing new sewage treatment systems in order to protect Apalachicola Bay from pollution. Florida has spent millions of dollars in a land acquisition program designed to purchase uplands habitat and land lying along the banks of the Apalachicola Bay to prevent development and prevent encroaching population from destroying this great natural resource. Florida has spent millions of dollars in research concerning oysters, finfish and shrimp, and in other estuarine research to better understand and protect the complex ecosystem that the Apalachicola Bay, the Apalachicola River and its associated wetlands and river system encompass. Florida has also spent millions of dollars, through the Water Management District, to purchase much of the land lying up and down the banks of the Apalachicola River from the Alabama border to its terminus at Apalachicola Bay. Again, this project is designed to prevent further development or encroachment into the flood plains of the Apalachicola.

My office has also spent countless attorney-hours in attempting to prevent the unlawful use of sovereignty lands in Apalachicola Bay and to protect the sovereignty lands of the State of Florida lying up and down the length of the Apalachicola River. The Apalachicola River is one of the great natural river systems of Florida. It has been constantly relied upon by both native

Americans before the Spanish established their missions and, since that time, by settlers and modern Floridians alike for food, navigation, recreation and many other uses purposes.

Due to Apalachicola Bay's unique status as a producer of shellfish, finfish, shrimp, crab and other seafood, and because of its unique role as a way of life for those who live along the river and bay, our intervention in this lawsuit was necessary.

I cannot over-emphasize our fear that the Army Corps of Engineers has not given sufficient consideration to the continued health and needs of an adequate supply of water to that significant and unique resource, the Apalachicola Bay.

This committee can be of valuable service in helping to protect the Apalachicola-Chattahoochee-Flint River Basin. This committee should first consider recommending amendments to the Water Resources Development Act to provide that the ecological integrity and the natural resources of the Apalachicola Bay are an authorized "project purpose" pursuant to the terms of the Water Resources Development Act. The report which you have received from the Coastal Resources Interagency Management Council provides specific language for that amendment. It is also my understanding that Florida has contacted Congressman Grant who serves on this committee and other members of the Florida delegation to ask that this amendment be placed in the Act to ensure that the ecological resources are a major

consideration for the Corps of Engineers in determining any future allocations of water use. An acknowledgement of the importance of the Apalachicola resource would strengthen greatly the recognition which the State of Florida has already given to Apalachicola Bay as a unique environment and habitat which must be protected.

Another recommendation for this subcommittee is the clear need for the Army Corps of Engineers to prepare the comprehensive study which has been proposed to determine a conceptual plan to address the long-term and comprehensive water resource needs of Alabama, Georgia and Florida in the Apalachicola-Chattahoochee-Flint River Basin. Florida's position remains that before any permanent reallocations of the use of these water resources are made, these comprehensive studies should be completed and a further plan developed regarding allocation of those water resources. While this study is pending, Florida must also have assurances from the Corps and other parties, that the flow of water will be maintained. Florida must be guaranteed a sufficient quantity and quality of freshwater at historical flow rates to maintain the Apalachicola Bay.

This committee can also be most helpful in its recommendations to the budget committees in ensuring that adequate funding is made available to the Army Corps of Engineers to plan, begin and complete these comprehensive studies over the next several years. Such detailed and comprehensive studies are in the best interest

of all states. We must determine the needs of the various users of these water resources and to ensure that an equitable and reasonable allocation is made to all user groups.

Finally, Mr. Chairman, I would note that the status report of Florida's participation and intervention in the federal lawsuit is attached to this testimony for your review. It is important that the committee understand that Florida's participation is to protect Florida's interest and Florida intends to push forward with this litigation as may be necessary. However, our position crosses state boundaries and ensures all citizens who would be adversely affected would be heard.

Again, I would like to thank committee members for your time and interest in this very important issue, and I would be happy to answer questions concerning this issue. These questions may be directed to me at my office, or to members of my staff, as you may deem necessary.

Thank you, Mr. Chairman.

ADDENDUM TO ATTORNEY GENERAL ROBERT A. BUTTERWORTH'S TESTIMONY

BEFORE THE SUBCOMMITTEE ON WATER RESOURCES

COMMITTEE ON PUBLIC WORKS AND TRANSPORTATION

UNITED STATES HOUSE OF REPRESENTATIVES

Saturday, September 29, 1990

County Commission Chambers - Leon County Courthouse

301 South Monroe Street

Tallahassee, Florida 32301

Testimony Concerning Field Hearings on the Down Stream Impacts of Water Supply Allocation and Management Along the Apalachicola-Chattahoochee-Flint River Basin

STATUS OF PENDING LITIGATION BETWEEN
STATE OF ALABAMA, PLAINTIFF, VS. UNITED STATES
ARMY CORPS OF ENGINEERS, ET.AL., DEFENDANT,
Civil Action No: CV-90-H-01331-E.

The State of Alabama responded to the Corps' reallocation plans by filing suit against the Corps, Colonel Thuss (District Engineer, Mobile District), General Bunker (Division Engineer, South Atlantic Division), and General Hatch (Chief of Engineers, USACOE) in the United States District Court for the Northern District of Alabama. The lawsuit contains five counts which challenge the legal validity of the Corps reallocation and changes to the Water Control Plan. These counts are set out in brief below.

COUNT ONE addresses concern, based on common law water rights theory, that any operation of the system under the amended Water Control Plan may vest Georgia interests with expanded rights of use to the permanent detriment of downstream interests. In addition, the count alleges that the Corps has violated its duty to operate Lake Lanier and the rest of the system in a neutral and objective manner by favoring the water supply interests of Georgia without fully evaluating the impacts of downstream interests.

COUNTS TWO through FIVE all allege separate legal deficiencies in the Corps reallocation documents in relation to the requirements of the National Environmental Policy Act (NEPA). The consistent theme is that these deficiencies stem from the Corps' failure to adequately consider and assess the impacts of the changes to downstream interests and natural systems.

The complaint asks for injunctive relief which would prevent the Corps from implementing any aspect of the reallocation, include any water supply contracts negotiated or executed between the Corps and Atlanta's regional utility authority or other entities. It also seeks a judicial declaration that the Corps is subject to the cited NEPA provisions and that it failed to fully comply with those requirements.

Served with the complaint (June 28, 1990), or shortly thereafter, were voluminous document requests by Alabama. The need for expedited production of documents and an immediate preliminary injunction hearing to enjoin the Corps from signing water storage contracts was obviated through an agreement between Alabama and the Corps whereby: the Corps received a 60 day extension to and including September 14, 1990, within which to provide documents; the Corps received a lesser extension of time within which to answer the complaint (answer filed September 12, 1990); and the Corps agreed to sign no contracts for a period of 60 days after producing the documents (November 13, 1990).
During July, 1990, Alabama and Georgia met unsuccessfully on at least two occasions to resolve their differences. On August 13,

1990, the Corps joined these states at the table and presented for consideration a draft Memorandum of Agreement similar in format to that executed by the three states and the Corps in 1983.

While these meetings were ongoing, Florida petitioned to intervene (August 15, 1990), and by August 22, 1990, the Alabama Wildlife Federation; Montgomery, Alabama; Gadsden, Alabama; and the City of Cartersville, Georgia had also petitioned to intervene. On August 22, 1990, the court issued an order calling for all memoranda - on the existing petitions to intervene - to be filed no later than September 7, 1990, and that shortly thereafter the court would rule on those petitions.

Attorney General Robert A. Butterworth filed the State of Florida's Petition to Intervene, and the Complaint filed in conjunction with that Petition raises the same allegations as Alabama's Complain, but adds a cause based on Florida's Coastal Zone Management Program and the Corps' refusal to subject the project to consistency review.

A meeting between the Corps, Alabama, and Georgia was conducted at Callaway Gardens on August 30, 1990. Florida was not invited and the meeting was not productive. However, Florida was, at this time, negotiating with the other three entities over the terms and conditions of a proposed Joint Motion to Stay Proceedings to be entered into by Alabama and the Corps. A Joint Motion was in fact filed on September 14, 1990. Georgia wrote to the court expressing its disagreement with the terms of the Joint Motion, primarily because it provided for no interim water storage commitments and because it has the effect of pushing back beyond November 13, 1990, the date the Corps has agreed to refrain from signing contracts.

Florida also wrote to the court but expressed general agreement with a stay in order to attempt to amicably resolve all concerns, even though Florida would prefer a favorable ruling on its intervention prior to a court order approving a stay. On September 19, 1990, the court approved the stay but did not close the door on pending interventions.

One of the terms of the stay is a limited production by the Corps of certain requested documents. These documents will be made available to all parties through October 1, 1990, at the Corps' offices in Mobile, Alabama. Florida is making arrangements, through the Northwest Florida Water Management District, for a delegation to travel to Mobile to inspect documents on September 26, 27 and 28, 1990.

Prior to September 7, 1990, Alabama opposed Cartersville's intervention and the Corps opposed the intervention of Gadsden, Montgomery and the Alabama Wildlife Federation. Neither party opposed Florida's petition.

On September 5, 1990, Georgia sought intervention, and on September 6, 1990, a joint petition to intervene was filed by Atlanta, Fulton County, DeKalb County, Gwinnett County, Cobb County-Marietta Water Authority, and the Atlanta Regional Commission. Opposition to these petitions, and any rulings thereon, have been halted because of the stay of proceedings.

The stay to pursue settlement is now in effect and the first meeting of Alabama, Georgia, Florida and the Corps was held in Birmingham, Alabama on September 21, 1990.

Northwest Florida
Water Management District

Route 1, Box 3100, Havana, Florida 32333
(On U.S. Highway 90, 10 miles west of Tallahassee)

(904) 539-5999

Walter D. Dover
Executive Director

PRESENTATION TO THE SUBCOMMITTEE ON WATER RESOURCES
COMMITTEE ON PUBLIC WORKS AND TRANSPORTATION
UNITED STATES HOUSE OF REPRESENTATIVES

September 29, 1990
Tallahassee, Florida
Presented by Walter D. Dover, Executive Director

The Northwest Florida Water Management District (NWFWMD) is mandated by State law to preserve, protect and manage the waters in northwest Florida. Within this region, the District has primary State jurisdiction over the regulation and management of water uses, including in-stream flows necessary to preserve fish and wildlife.

The Apalachicola River and Bay support one of the most productive and valuable estuarine resources in the State of Florida and the southeastern United States. Because of this fact, the NWFWMD has a long-standing commitment regarding the protection of these unique and important natural resources.

At a cost of over $10 million in public money, the NWFWMD has purchased some 35,500 acres contiguous to the Apalachicola River and Bay to help ensure the continued health and productivity of the System.

In addition, the Apalachicola River and Bay have been ranked the highest regional priority under Florida's Surface Water Improvement and Management Program. This District, together with several other agencies, is committing considerable effort to comprehensively address the needs and issues relating to the System. Part of this ongoing effort is a detailed assessment of the freshwater needs of Apalachicola Bay's diverse ecosystems.

The overall productivity and viability of the Apalachicola System, however, are heavily dependent upon the timing and quantity of freshwater inflow from out-of-state, specifically from the Flint and Chattahoochee Rivers.

The NWFWMD is very concerned, therefore, in its analysis of the Post Authorization Change Notification Report relating to Lake Lanier, that the U.S. Corps of Engineers has not adequately addressed the basin-wide impacts of its proposed actions, including any adverse impacts upon the Apalachicola River and Bay System. Information provided in the PAC Report simply is insufficient to gauge potential impacts, especially during periods of low flow.

CLIFFORD BARNHART, Chairman - Pensacola
L.E. McMULLIAN, JR., Vice Chairman - Bascom
ANDRE DYAR, Sec./Treas. - Panama City
KENNETH HOFFMAN, Tallahassee
RALPH A. PETERSON, Pensacola
PHYLLIS J. REPPEN, Panama City
CHARLES W. ROBERTS, Hosford
LLOYD F. WEEKS, Laurel Hill
JOHN M. CREEL, JR., Jay

To our collective loss, we have discovered too many times that fish and wildlife are far less adaptable to artificial changes in freshwater supply than human beings.

Our serious concerns about the Corps' proposed actions are reflected in a resolution adopted by the NWFWMD Governing Board on August 23rd, 1990. Many of its recommendations parallel those of the Coastal Resources Interagency Management Committee, submitted for this Committee's consideration.

The Governing Board urges that none of the proposed actions in the PAC Report be undertaken prior to the completion of a water needs study and basin-wide plan of the ACF River Basin in its entirety, including the freshwater needs of the Apalachicola River and Bay.

The Governing Board also urges that a mechanism for interstate consultation and mediation be established to guide the development and implementation of this basin-wide management plan to ensure equity for all concerned parties.

Lastly, the Governing Board seeks and supports federal designation of the freshwater needs of the fish and wildlife of the Apalachicola River and Bay as an authorized project purpose of the ACF Waterway.

The NWFWMD is encouraged by the Corps' proposed Comprehensive Studies. We believe that, with the good will and commitment of the parties involved, and with an appropriate mechanism to undertake these studies, that the water use and water rights issues within the whole ACF basin can be satisfactorily resolved. This agency is eager to assist and cooperate in any way it can to further this effort.

We wish to stress, however, that undertaking any of the proposed PAC Report actions at this time is premature and potentially damaging to a resource that cannot be replaced. We urge your consideration in this matter.

Thank you for the opportunity to provide this testimony.

OFFICE OF THE TREASURER
DEPARTMENT OF INSURANCE
TOM GALLAGHER
TREASURER

TESTIMONY BEFORE U.S. HOUSE SUBCOMMITTEE ON
WATER RESOURCES
COMMITTEE ON PUBLIC WORKS AND TRANSPORTATION
REGARDING THE EFFECT OF WITHDRAWAL OF ADDITIONAL
WATERS FROM LAKE LANIER

SEPTEMBER 29, 1990

Tom Gallagher
Treasurer and Insurance Commissioner
Florida Department of Insurance and Treasury
The Capitol, PL-11
Tallahassee, Florida 32399-0300
(904) 488-3440

GOOD MORNING.

I AM TOM GALLAGHER, TREASURER AND INSURANCE COMMISSIONER FOR THE STATE OF FLORIDA, AND A MEMBER OF FLORIDA'S CABINET. I WOULD LIKE TO WELCOME ALL OF YOU TO TALLAHASSEE AND TO THANK YOU ALL FOR TAKING THE TIME TO BE HERE. THIS IS AN IMPORTANT ISSUE FOR US.

FIRST, I WOULD LIKE TO SAY THAT I UNDERSTAND THE NEED FOR ADDITIONAL DRINKING WATER FOR ATLANTA'S RESIDENTS. RAPID GROWTH HAS CAUSED WATER PROBLEMS FOR US HERE IN FLORIDA, TOO. SUPPLYING INCREASING DEMANDS FOR DRINKING WATER IS ONE OF THE MOST DIFFICULT TASKS WE ARE FACING TODAY. I DO NOT UNDERESTIMATE THE DIFFICULTY OF <u>YOUR</u> TASK.

WE NEED TO KEEP IN MIND, HOWEVER, THAT ANY DECISION TO WITHDRAW SUCH LARGE AMOUNTS OF ADDITIONAL WATER FROM LAKE LANIER DOESN'T JUST AFFECT GEORGIA RESIDENTS. SUCH A DECISION HAS THE POTENTIAL FOR SEVERE REPERCUSSIONS THAT WILL AFFECT MILLIONS OF FLORIDIANS AS WELL. THIS IS CLEARLY NOT A LOCAL DECISION. YOUR BEING HERE TODAY INDICATES THAT YOU'VE RECOGNIZED THAT FACT.

IT MAY SEEM ODD TO THOSE OF YOU FROM OUT OF STATE FOR FLORIDA'S TREASURER TO BE CONCERNED ABOUT AN ENVIRONMENTAL ISSUE. AS A MEMBER OF THE FLORIDA CABINET, HOWEVER, I HAVE THE RESPONSIBILITY OF VOTING ON NUMEROUS ENVIRONMENTAL ISSUES - EVERYTHING FROM LAND AND WATER USE ISSUES TO PROTECTION OF ENDANGERED SPECIES, REVIEW OF UNDERGROUND POLLUTANT STORAGE TANK RULES, AND APPROVAL OF POWER PLANT SITINGS.

ONE ISSUE THAT HAS BEEN OF PARTICULAR CONCERN TO ME AS A CABINET MEMBER IS THE PROTECTION OF ONE OF OUR STATE'S MOST VALUED AND IMPORTANT RESOURCES - APALACHICOLA BAY.

APALACHICOLA BAY IS IMPORTANT TO THIS STATE AND THE ENTIRE GULF COAST BOTH ECONOMICALLY AND ENVIRONMENTALLY. THE SEAFOOD PRODUCED IN THE BAY IS SOLD ALL OVER THE UNITED STATES AND INTERNATIONALLY. YOU'VE (PROBABLY) HEARD (WILL HEAR) A LOT OF FIGURES TOSSED AROUND TODAY. EVERY TIME AN ISSUE INVOLVING APALACHICOLA BAY COMES BEFORE THE CABINET, WE ARE BOMBARDED WITH PLEAS FROM THE PEOPLE WHO MAKE THEIR LIVING FROM THE BAY. ALL OF THEM COME ARMED WITH STATISTICS ABOUT THE IMPORTANCE OF THIS ESTUARY.

I AM TOLD THAT, IN THE EARLY '80s, AS MUCH AS 90% OF THE OYSTERS HARVESTED IN FLORIDA CAME FROM THE BAY. I'VE HEARD A DOCKSIDE VALUE FIGURE OF $14 MILLION IN ANNUAL SEAFOOD LANDINGS FROM THE BAY. THESE ARE NOT TRIVIAL FIGURES. THE SEAFOOD INDUSTRY IS THE MOST IMPORTANT EMPLOYER IN COASTAL NORTHWEST FLORIDA.

IN ADDITION, APALACHICOLA BAY ACTS AS AN AQUATIC NURSERY FOR THE ENTIRE GULF REGION. THIS ESTUARY WOULD NOT EXIST WITHOUT THE ABUNDANT SUPPLY OF FRESH WATER FROM THE APALACHICOLA RIVER. I AM SURE THAT THERE ARE SCIENTISTS HERE TODAY THAT WILL PROVIDE YOU WITH ALL THE INFORMATION YOU NEED TO DEMONSTRATE THE IMPORTANCE OF THAT FRESH WATER FLOW. BUT THE PEOPLE WHO LIVE AND WORK IN THIS AREA ALREADY KNOW THAT THEIR WAY OF LIFE DEPENDS ON MAINTAINING AND PROTECTING THE DELICATE APALACHICOLA BAY ECOSYSTEM. THEY KNOW THAT ANY ACTIVITY THAT AFFECTS THE BAY CLEARLY AFFECTS THEIR LIVES AND THE LIVES OF THE PEOPLE WHO WORK IN ALL ASPECTS OF THE SEAFOOD INDUSTRY.

THE STATE OF FLORIDA HAS SPENT MILLIONS OF DOLLARS PROTECTING THE APALACHICOLA BAY AREA. THE IMPORTANCE OF THIS AREA HAS BEEN RECOGNIZED THROUGH DESIGNATION OF THE BAY AS AN AQUATIC PRESERVE AND AS AN OUTSTANDING FLORIDA WATER, DESIGNATIONS THAT AFFORD THE BAY EXTRA PROTECTION IN MANY WAYS. IN ADDITION, THE FLORIDA LEGISLATURE HAS DESIGNATED FRANKLIN COUNTY AN AREA OF CRITICAL STATE CONCERN.

AS A RESULT OF THE CRITICAL STATE CONCERN DESIGNATION, THE GOVERNOR AND CABINET FIND OURSELVES DEALING WITH A LOT OF ISSUES INVOLVING FRANKLIN COUNTY AND THE BAY - ISSUES SUCH AS THE PLACEMENT OF A PARKING LOT, THE APPROVAL OF A MINOR ZONING CHANGE, OR THE USE OF SEPTIC TANKS. THESE ISSUES MAY SEEM TRIVIAL AT FIRST.

I KNOW SOMETIMES THE INDIVIDUALS INVOLVED MUST WONDER WHAT POSSIBLE INTEREST THE GOVERNOR AND CABINET COULD HAVE IN WHAT TYPE OF SEPTIC TANK THEY INSTALL. BUT THE FACT THAT THESE SEEMINGLY TRIVIAL DECISIONS ARE CONSIDERED CABINET LEVEL ISSUES DEMONSTRATES THE IMPORTANCE THAT FLORIDA PLACES ON APALACHICOLA BAY. IT IS <u>ABSOLUTELY ESSENTIAL</u> THAT WE PROTECT IT.

I REALIZE THAT YOU ARE FACED WITH A DIFFICULT DECISION. ANY DECISION THAT REQUIRES A DELICATE BALANCING OF DIFFERENT INTERESTS IS NECESSARILY A DIFFICULT ONE. LET ME TELL YOU, WE HAVE TO FACE A LOT OF THOSE DECISIONS OURSELVES, AND SOME OF THE TOUGHEST DECISIONS THE GOVERNOR AND CABINET HAVE HAD TO FACE INVOLVE APALACHICOLA BAY.

SOME OF THOSE DECISIONS HAVE INVOLVED DEVELOPMENT NEAR THE BAY. DEVELOPMENT COULD BRING A MUCH-NEEDED ECONOMIC BOOST TO A REGION BADLY IN NEED OF JOBS. LET'S FACE IT, FRANKLIN COUNTY HAS HAD A TOUGH TIME ECONOMICALLY DURING THE PAST FEW YEARS. IT'S BEEN HIT HARD BY TWO HURRICANES, AND IT HAS SUFFERED. IT WOULD BE SO <u>EASY</u> TO APPROVE A PROJECT THAT COULD LIGHTEN THE ECONOMIC BURDEN FOR THE COUNTY.

BUT NO MATTER HOW WELL DESIGNED A PROJECT IS, NO MATTER HOW SOPHISTICATED A STATE-OF-THE-ART STORMWATER CONTROL SYSTEM IS, NO MATTER HOW WELL-INTENTIONED THE DEVELOPERS ... SYSTEMS FAIL, PROJECTIONS DO NOT PAN OUT, MANAGERS COME AND GO. EVEN THE REMOTE POSSIBILITY FOR CONTAMINATION OF THE APALACHICOLA BAY IS UNACCEPTABLE. WE HAVE TO BALANCE THE NEEDS, BUT WE ALWAYS HAVE TO LOOK AT THE BIG PICTURE.

THAT'S ALL I'M ASKING YOU TO DO. PLEASE LOOK AT THE BIG PICTURE. WE'RE TALKING ABOUT THE FUTURE OF THE SEAFOOD INDUSTRY IN FLORIDA AND ALONG THE ENTIRE GULF COAST, AND I ASK YOU TO GIVE VERY CAREFUL CONSIDERATION TO ALL POTENTIAL EFFECTS OF ANY DECISION YOU MAKE.

THANK YOU FOR THE OPPORTUNITY TO BE HERE TODAY.

ARE THERE ANY QUESTIONS?

Comments on behalf of

Governor Guy Hunt
State of Alabama

Before

The Subcommittee on Water Resources
Committee on Public Works and Transportation
United States House of Representatives

Field Hearings

Decatur, Georgia
September 28, 1990

and

Tallahassee, Florida
September 29, 1990

Presented by: Dr. Don C. Hines
and
Mr. Walter B. Stevenson, Jr.

Alabama Department of Economic
and Community Affairs
Post Office Box 250347
Montgomery, Alabama 36125-0347

Mr. Chairman and members of the Subcommittee.

It is my pleasure to appear before the Subcommittee on Water Resources representing Governor Guy Hunt and have the opportunity to assist in creating a better understanding of Alabama's perspectives regarding regional-interstate water resource issues impacting Georgia, Florida and Alabama.

The Subcommittee's present concerns center around the Army Corps of Engineers proposals to reallocate water storage at various federal projects, located on interstate streams, for exclusive use in Georgia. Let me begin by assuring the Subcommittee that it is not Alabama's intent to hinder the use of interstate streams by any entity for beneficial uses, but to: a) assure that downstream users and interests, including southern parts of Georgia, Florida and specifically Alabama, receive equitable access to and distribution of these same finite water resources; and b) to protect current and future economic and environmental interests. Because the proposed reallocations involve a huge quantity of water -- 106% of the amount the entire State of Alabama used for public water supply in 1989 -- they must be properly analyzed and evaluated.

The proposed reallocations of water storage at Lake Lanier in the Chattahoochee-Apalachicola River Basin and at both Carters Lake and Lake Allatoona in the Alabama-Coosa River Basin all concern federal reservoirs which were designed as integral parts of total river systems and are located in the headwaters of interstate rivers. These three federal projects were designed as integral parts of total river systems to support specific purposes which were approved by Congress. The Congress also approved construction financing for the projects and continues to support these project purposes today by funding their operations and maintenance. The reallocations would modify the original Congressionally authorized, primary project purposes at all three federal reservoirs. The Corps of Engineers, even with these and other Federal projects on both river systems, have historically had problems operating the river systems to meet their Congressionally approved purposes. This has been primarily due to the lack of adequate water and/or flows to support the authorized and funded purposes of the river systems.

The reservoirs, with their corresponding reallocations, are located in the head waters of interstate streams flowing from Georgia to Alabama and Florida. The reservoirs contain significant portions of the total storage in each basin. This storage is vital to the respective river systems.

Reservoirs provide support for the Congressionally authorized purposes, such as navigation, hydropower production and the augmentation of downstream flows necessary to ensure the economic and environmental well-being of the entire basins when normal flows are insufficient.

The Army Corps of Engineers has undertaken studies of the proposed reallocations. The Corps has released draft studies for Lake Lanier and Carters Lake for public review and comment, but has not yet released the draft study on Lake Allatoona. The State of Alabama has filed substantial comments regarding the draft reports and the lack of corresponding, full environmental impact statements for Lake Lanier and Carters Lake. I have previously provided copies of our written comments to the Subcommittee and I now reiterate my request that Alabama's comments on these studies be made a part of this Subcommittee's records.

Alabama's comments addressed issues such as: a) the failure to consider downstream interests, b) a lack of comprehensive water resources planning for all water uses for an appropriate time period, and use of a planning and review process which failed to meet the Corps of Engineers internal requirements and the National Environmental Policy Act. Alabama continues to contend that insufficient, reliable data is available upon which to base prudent, interstate water resource decisions at this time. That is why Alabama continues to support the proposed interstate comprehensive plan that will assess the cumulative impact of the proposed reallocations. This comprehensive plan should also assess the impacts on the basins as a whole and survey the water resource needs of Alabama, Florida and Georgia in light of the limited resources available. To date Georgia has failed to indicate they will participate in this process. Alabama has initiated a water resources planning and management study that will provide guidance for our input to the comprehensive plan.

Without such comprehensive and reliable data any actions would be premature and result in perpetual, irrevocable harm to downstream economic and environmental interests and the users of these interstate water resources -- not only in Alabama and Florida, but also in south Georgia. Alabama believes its requests are reasonable and capable of substantiation to the point that the State has filed suit against the Corps of Engineers in the United States District Court. I am requesting that the copy of the complaint filed by the State of Alabama, and previously made available to the Subcommittee, also be made a part of your records.

I hope that the Subcommittee reviews Alabama's written comments regarding the proposed reallocations in detail and concurs that the data available is not comprehensive and uniformly accepted by the States as reliable. Given these circumstances, any attempts, at this time, to base Congressional action or approval of the proposed reallocations on the existing limited data and analysis should be deferred to avoid serious conflicts with existing Federal mandates, including the National Environmental Policy Act. I also hope that the Subcommittee agrees that the course of action presently being followed to address these regional-interstate water issues is just and that it will result in a local and equitable resolution of the current interstate water resource issues impacting Georgia, Florida and Alabama.

If the Subcommittee needs any additional information or further details, our office, on behalf of the Governor, will be happy to respond. I thank you for your attention and time.

STATEMENT

BEFORE THE U.S. HOUSE OF REPRESENTATIVES

SUBCOMMITTEE ON WATER RESOURCES,

COMMITTEE ON PUBLIC WORKS AND TRANSPORTATION

FIELD HEARING

TALLAHASSEE, FLORIDA

SEPTEMBER 29, 1990

STATEMENT ON BEHALF

OF THE

APALACHICOLA-CHATTAHOOCHEE-FLINT INLAND WATERWAY

AND RIVER SYSTEM

Communications concerning this
document should be addressed to:

Mr. Phillip Hornsby, President
Mr. Homer Hirt, Vice President, Florida
Major General Dan Raymond, USA Retired,
Director-at-Large, Georgia
Mr. William Sumption, Executive Director

TRI RIVERS
Waterway Development Association
P. O. Box 2232
Dothan, Alabama 36302

Telephone (205) 792-8611

"Promoting the Effective Development, Utilization and Maintenance
of the Apalachicola-Chattahoochee-Flint Inland Waterway and River System"

STATEMENT

BEFORE THE SUBCOMMITTEE ON WATER RESOURCES

OF THE HOUSE PUBLIC WORKS AND TRANSPORTATION COMMITTEE

SEPTEMBER 29, 1990

Thank you, Chairman Nowak, Congressman Grant and other members of the Subcommittee for Water Resources for this opportunity to present the needs of the Apalachicola-Chattahoochee-Flint Inland Waterway and River System. Today, these valued needs have never been more critical, particularly so for all downstream users south of Atlanta to the Gulf of Mexico

I am Homer B. Hirt, Jr., Vice President, Florida, of the Tri Rivers Waterway Development Association. The primary objectives of our association are the effective development, utilization and maintenance of the Apalachicola-Chattahoochee-Flint Inland Waterway and River System to serve the needs of regional economic development and commercial navigation.

Our tri-state organization is, of course, also very interested in and strongly supportive of measures providing flood control, hydroelectric power generation, water quality, equitable water supply, drought management, recreation, and wildlife enhancement. Our genuine support for these water resource purposes are further defined in our association bylaws. Principally, our perspective is focused on the equitable use of the ACF River System resources and services, a perspective which we feel your committee has demonstrated excellent support for in the past.

We are most grateful for your interest concerning the proper analysis of the proposed reallocation of Lake Lanier. In light of the recent tri-state controversy concerning the additional and excessive demands desired to be placed upon the Chattahoochee River and Lake Lanier by the greater Atlanta area, we are here before you today with strong concerns. These concerns focus on insuring that the authorized construction purposes of Federal reservoirs on our river system will not be impacted further by efforts to receive special local support from the shared water resources serving the tri-state region, an area encompassing over 19,800 square miles.

This issue is not a matter of Atlanta growing, but rather a matter of Atlanta growing at the expense of others in the same river valley. For comparison, look west to Los Angeles, California and recall the destruction of the Owens Valley and impacts on other regions. It is with that memory and awareness

of similar actions elsewhere that we question the wisdom of Atlanta's apparently selfish plan. Their proposed plan does not formally recognize the present and future growth needs of our other communities in the Chattahoochee, Flint or Apalachicola river valleys. The plan must be revised to recognize and allow for the needs of other local regions along the interstate river system. Let us not consider repeating the history lesson of Owens Valley.

Atlanta does have other water resource alternatives, but perhaps such options are simply not as inexpensive and convenient as consuming as much of the Chattahoochee River System as Atlanta area interests desire. Atlanta, though, can more readily afford additional infrastructure and water supply costs than the other, much smaller communities in our tri-state river basin area. This significant point should be recognized before we further stress Lake Lanier and the Chattahoochee River, particularly during periods of low flow and drought when the downstream interests are harmed the most. As well, the needs of those upstream of Atlanta have to be recognized and considered.

Mr. Chairman, you and your fellow committee members have demonstrated a strong commitment to keep our nation's waterway systems as viable entities to the Nation's economy. Through this sound commitment you have strengthened our Nation's economy and the standard of living for many of our citizens. The citizens living in the ACF basin region of Alabama, Florida and Georgia have benefited and are grateful for your support and foresight.

We ask that the Congress of the United States reaffirm the long term perspective that built the ACF Inland Waterway and River System. That concept, based on sound regional priorities and placed into Federal law, best serves the broad interests of the 19,800 mile river basin region. The original purposes of navigation, maximum hydropower production, and flood control must be preserved to insure substantial cost savings for area residents along the interstate river system.

In closing, we are thankful for your commitment and for the knowledge that it will not waiver. We respectfully ask that your subcommittee defer legislative actions concerning the proposed reallocation of Lake Lanier until the Corps of Engineers completes the comprehensive study and issues a more thorough and meaningful final report on the reallocation proposal.

I would like to again thank you for allowing me to testify today. We are appreciative of your continued leadership and diligence.

STATEMENT

BEFORE THE SUBCOMMITTEE ON WATER RESOURCES

OF THE HOUSE PUBLIC WORKS AND TRANSPORTATION COMMITTEE

SEPTEMBER 29, 1990

Thank you, Chairman Nowak, Congressman Grant and other members of the Subcommittee for Water Resources for this opportunity to appear and address our concerns over the draft proposal to reallocate a substantial portion of the usable storage pool at Lake Lanier, Georgia. I am William S. Sumption, Executive Director, Tri Rivers Waterway Development Association.

The proposed reallocation of Lake Lanier is an extremely complex issue. The current proposal by the Corps of Engineers represents potential regional economic and ecological impacts beyond the walls of the greater Atlanta area. We acknowledge that the answers to solving Atlanta's water needs beyond 1996 are not simple. In the same respect, the present and future needs of other local regions and communities along the river valley, sharing a common resource, should be addressed in such a proposal prior to formal presentation to the Congress. This has not been accomplished. We wonder why. Perhaps the answers are even more critical than we realize.

I would like to highlight some of our principal concerns as addressed in the attached four page document which represents our organization's general views concerning the proposed reallocation report provided to the public by the Corps of Engineers. This document is an executive summary of comments detailed in a 25 page report we prepared concerning specific information discussed in the Corps of Engineers report. Our more detailed report is available to any party upon request. (REFER TO THE DOCUMENT)

As evidenced during the six public hearings concerning the Corps of Engineers draft report, many subject areas were omitted or not covered in sufficient detail. We have addressed such concerns in our report analysis as have others throughout the tri-state region. We recommend a careful reading of our report to capture the larger picture, i.e., issues of concern and interests not considered or adequately referenced in the original Corps of Engineers study process.

The final Corps of Engineers report must be more thorough. Only then can the Congress undertake a proper consideration of additional water diversions from Lake Lanier and the Chattahoochee River. The Corps of Engineers, with the support

and cooperation of the States of Alabama, Florida and Georgia, should be able to answer many of our questions through completion of the ACF comprehensive river basin study. This study, moreover, should be completed prior to consideration of any further reallocations.

In closing, let me assure you of our sincere interest in supporting an equitable agreement, once all principal river basin needs have been adequately addressed in the Corps of Engineers analysis. The larger regional economic development and ecological needs must be weighed carefully in such an analysis. We are confident that your committee and the Congress share this perspective in the interest of fairness and proper administration of Federal projects.

I thank you for allowing me the opportunity to testify today. We are appreciative of your continued leadership and diligence. And we thank you for visiting our fine region of the southeastern United States of America. We look forward to your return.

TRI RIVERS WATERWAY DEVELOPMENT ASSOCIATION

EVALUATION OF

U.S. ARMY CORPS OF ENGINEERS

POST AUTHORIZATION CHANGE NOTIFICATION REPORT

FOR THE

REALLOCATION OF FEDERAL STORAGE

FROM ACF SYSTEM HYDROPOWER TO ATLANTA REGION WATER SUPPLY

OF LAKE SIDNEY LANIER, GEORGIA

OCTOBER 1989

DRAFT REPORT

TRI RIVERS
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William S. Sumption
Executive Director

EXECUTIVE SUMMARY

Draft Post Authorization Change Notification Report for Reallocation of Lake Lanier Federal Water Storage

The Corps of Engineers proposal to reallocate 207,000 acre-feet of Federal storage at Lake Sidney Lanier, Georgia has National and regional growth policy implications. The impacts to man's environment are not considered to be minor and insignificant.

Tri Rivers Waterway Development Association does not support the report's conclusions and recommendations.

The Congress should not be requested to act on any legislation concerning this proposed reallocation until issues of concern are resolved or appropriately clarified through further study.

Consideration for any proposed reallocation of Lake Lanier must recognize the needs and interests of all ACF Basin users. Such consideration should recognize that:

1. The Apalachicola-Chattahoochee-Flint (ACF) Inland Waterway and River System must be treated as a comprehensive system. No water purpose or area served should be treated or considered in isolation.

2. No particular state, county, municipality or interest should be allowed to exert a proprietary interest in the waters of the ACF, to the detriment of any other state, county, municipality or interest. ACF water use concerns must be addressed on a tri-state basis.

3. For the long term, as demands for the ACF's finite waters continue to grow, a Federally chartered tri-state compact should be established to allocate the waters on an equitable basis throughout the basin region.

4. During periods of drought, all interests and areas must share equitably in the available waters.

5. Lake Lanier Federal reservoir water storage releases must serve the ACF Inland Waterway and River System in an effective manner.

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a. Quantitative releases from Lake Lanier to serve the purpose of water quality must be based on the qualitative needs of all communities and areas along the entire length of the ACF system, and not just those of the Atlanta metropolitan area.

b. Quantitative releases from Lake Lanier must be based, in addition to water quality requirements, on all other downstream water supply requirements, to include supporting navigation.

6. All communities and industries discharging effluents into the ACF waters must be held to the standards prescribed by the Federal Clean Water Act.

7. For the long term, the Atlanta metropolitan area must develop major innovative water management concepts and major alternative sources for water supply, including but not limited to consideration of an impoundment of the Flint River.

8. A long term navigation channel maintenance program and supporting water quality certifications are essential to the orderly development and use of the ACF system for waterborne transportation supported commerce and industry.

9. Continuing Federal support for the operation and maintenance of the ACF system to serve all its authorized purposes is necessary to the well-being and growth of the ACF basin area.

10. In any consideration of the reallocation of impounded waters from hydroelectric power generation to water supply, the environmental impact of replacement of clean, renewable, economical hydro peaking power generation by far more costly fossil fueled generation must be a major factor of consideration. Additionally, the true cost of lost hydropower generation must be weighed against the costs of alternatives for water supply. Moreover, the environmental impact on other downstream water uses must be weighed and evaluated in the same manner.

There exists a reasonable basis for concern about the known and potential impacts of the proposed reallocation of Lake Lanier:

Atlanta Region Water Supply Needs - All water supply needs may not have been addressed in the report, as other initiatives are ongoing. Reallocation, if comprehensive, only provides for water supply until the year 2010. Requirements and sources after year 2010 must be identified. A 50 year Atlanta Region water supply plan was not presented in the report.

New National Economic Development Plan - The original NED plan, the reregulation dam, did not significantly impact lake levels and authorized purposes as will the proposed alternative, reallocation. The reregulation dam concept was sound. Proposed year 2010 water supply demands have since increased from 484 to 529 million gallons per day. Additionally, proposed direct withdrawals from Lake Lanier have increased rather significantly from 53 to 150+ million gallons per day, further impacting authorized purposes of the Federal storage at Lake Lanier. Designation of a new NED Plan may be inappropriate based on lack of Federal interests, cost comparisons favoring the reregulation dam and unnecessary impact to existing project purposes and basin needs.

Regional Water Supply Management and Arbitration - A Federally chartered tri-state compact would best serve the needs for overseeing the protection and use of regional waters shared by the States of Alabama, Florida and Georgia. The PAC Report recommendation to vest such authority in one state may not be acceptable to the other states and region interests.

Existing River Basin Conditions - Specific river segment conditions have not been identified. An Environmental Impact Statement (EIS) performed jointly by the Corps and EPA could resolve the issues and concerns expressed. Water quality and protection of assimilative capacity downstream (and upstream) should be insured prior to further consideration of the plan.

Future Water Supply Needs for the ACF Basin - Only the Atlanta region needs are identified in the report. Current and future needs of other ACF basin regions were not analyzed.

Reallocation Water Quantity - The evaluation provides a comparison of average daily water demands and reservoir storage requirements on page 10. A comparison is warranted.

Consumptive Rate of Return - The report does not state that any specific quantities of treated wastewater must be returned to the Chattahoochee River. Such contractual requirements should be a condition for reallocation consideration. State of Georgia information in the report indicates an additional 5% of returns will be lost from available flows. Interbasin transfers losses grow from 33.67 to 84.18 million gallons per day.

Critical Yield of Lake Lanier - The Corps and State of Georgia used the 1939-1942 drought's firm yield in report analysis. Substitution of the 1984-1989 drought's firm yield reveals that available flows from Lake Lanier may be reduced an additional 258 cubic feet per second, if a similar drought occurs. This comparison, as explained on pages 13-16 of the evaluation, reveals that the conservation pool of Lake Lanier is essentially "captured" by proprietary support for Atlanta region water supply. The concern is significant.

Drought and Climatic Analysis - These considerations deserve more attention. Future local growth can not be based on climatic assumptions that may not be accurate historically. The watershed region (notably small) around Lake Lanier experiences different rainfall patterns than experienced in much of the ACF Basin. The rainfall period of 1960 to 1982 may have represented a wet cycle.

Water Quality - Insufficient information was provided concerning water quality needs of the ACF Basin. The shortcoming is significant as such requirements must be addressed in detail. The report does highlight that the reallocation or the Water Control Plan could impact water quality by decreased, increased or altered flows. Water quality considerations were based on a monthly model, whereas water quality standards are based on minimum flow conditions. Further analysis is required.

Hydropower Generation - The environmental assessment finding of No Significant Impact (FONSI) does not address the economic impacts on ACF Basin hydropower production. As well, hydropower customers are not protected from replacement power costs after SEPA contracts expire in 1994, though the life of the Lake Lanier project has not expired. This is not acceptable, as reallocation impacts are permanent ... for eternity. The Water Control Plan does not further enhance the generation of hydropower as summer reservoir levels are projected to be higher and the impact is even more pronounced if navigation support is halted.

Navigation - The combination of losses from reduced wastewater returns, increased interbasin transfers and "capture" of usable Federal storage at Lake Lanier by Atlanta region water supply reduce significantly the potential flow support which should be provided from Lake Lanier. The impact would be most critical during times of low flow and drought, specific periods during which the 65% of the total Federal storage (Lake Lanier) for the ACF Inland Waterway and River System is most valued. Lake Lanier must remain part of the comprehensive ACF System.

Economic Analysis and Environmental Assessment - The following considerations should be incorporated in the report:

a. Perform an Environmental Impact Statement (EIS) and any necessary supporting enviromental studies to include review of Flint River conditions and projected impacts.

b. Analyze the present and future economic needs of and projected impacts on the Chattahoochee River Valley region south the Atlanta region.

c. Provide a thorough analysis of year 2010 reallocation water demands, interbasin transfers and reduced flows based on the known conditions of the 1984-1989 drought, which represent the current historical low flow conditions for ACF Basin.

ALFRED "AL" LAWSON, JR., REPRESENTATIVE
FLORIDA HOUSE OF REPRESENTATIVES
NINTH DISTRICT

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TALLAHASSEE, FLORIDA 32399-1300
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SEPTEMBER 29, 1990

SPEECH TO MEMBERS OF THE CONGRESSIONAL SUBCOMMITTEE ON WATER RESOURCES

CONGRESSMEN, THANK YOU FOR INVITING ME TO SPEAK HERE TODAY. I AM AL LAWSON, REPRESENTATIVE FOR THE NINTH DISTRICT IN THE FLORIDA HOUSE OF REPRESENTATIVES AND CHAIRMAN OF THE HOUSE NATURAL RESOURCES COMMITTEE.

I HAVE COME TO EXPRESS MY CONCERN FOR THE FUTURE OF THE APALACHICOLA BAY. PERHAPS THE MOST CRUCIAL FACTOR AFFECTING THE HEALTH AND PRODUCTIVITY OF THE BAY IS THE FLOW OF FRESH WATER INTO IT. OBVIOUSLY, IF THERE WERE NO FRESH WATER, THE BAY WOULD NOT EXIST AS AN ESTUARY. IF THE FLOW OF FRESH WATER CONTINUES TO BE REDUCED BY DIVERSIONS OF WATER FROM THE APALACHICOLA-CHATTAHOOTCHEE-FLINT RIVER SYSTEM, THE ESTUARY MAY BE REPLACED BY SOME ALTERNATIVE ECOSYSTEM. THIS WOULD BE DEVASTATING FOR A NUMBER OF REASONS, WHICH YOU MAY ALREADY KNOW.

HISTORICALLY, THE APALACHICOLA BAY HAS BEEN ONE OF THE STATE'S MAJOR SEAFOOD-PRODUCING AREAS. I HAVE SPENT A GREAT DEAL OF TIME IN THE APALACHICOLA BAY AREA SINCE I HAVE BEEN IN THE STATE LEGISLATURE AND HAVE COME TO UNDERSTAND HOW IT FUELS THE LOCAL AND STATE ECONOMIES AND DEFINES THE LOCAL CULTURE. OVER 85 PERCENT OF FRANKLIN COUNTY'S RESIDENTS MAKE THEIR LIVING FROM THE BAY. THE DOCKSIDE VALUE OF MARINE HARVESTS FROM THE BAY HAS AVERAGED OVER $12 MILLION ANNUALLY THROUGH 1985, CONTRIBUTING AN ESTIMATED $30 MILLION TO THE LOCAL ECONOMY AND $65 MILLION TO THE STATE ECONOMY YEARLY.

THE BAY IS ONE OF THE MOST PRODUCTIVE IN THE NORTHERN HEMISPHERE, BOTH FOR SEAFOOD GENERALLY AND OYSTERS IN PARTICULAR. IT IS DESIGNATED AS A NATIONAL ESTUARINE SANCTUARY, A FLORIDA AQUATIC PRESERVE, AN OUTSTANDING FLORIDA WATER, A FLORIDA CLASS II SHELLFISH HARVESTING AREA, AND AN AREA OF CRITICAL STATE CONCERN. THE UNITED NATIONS DESIGNATED IT AS AN INTERNATIONAL BIOSPHERE PRESERVE. THESE DESIGNATIONS ARE INTENDED TO PROTECT THE WATER QUALITY AND PRODUCTIVITY OF THIS VALUABLE NATURAL RESOURCE.

THE APALACHICOLA BAY NORMALLY HAS JUST THE RIGHT SALINITY FOR OPTIMUM OYSTER PRODUCTION AND TO SERVE AS HABITAT FOR NUMEROUS OTHER SEAFOOD SPECIES. BUT THE BAY EXPERIENCED EXTENDED DROUGHT CONDITIONS FROM 1986 THROUGH 1988, CAUSING INCREASED SALINITY IN THE BAY, WHICH ATTRACTS OYSTER PREDATORS. THESE CONDITIONS HAVE BEEN MADE WORSE BY THE DECREASE IN FLOW INTO THE BAY FROM THE APALACHICOLA RIVER DUE TO INCREASED DEMANDS FOR FRESH WATER BY GEORGIA AND ALABAMA PLACED ON THE APALACHICOLA-CHATTAHOOTCHEE-FLINT RIVER SYSTEM.

IN MANAGING THE RIVER SYSTEM, THE ARMY CORPS OF ENGINEERS HAS NOT ADDRESSED THE FRESHWATER NEEDS OF THE APALACHICOLA BAY BECAUSE THE CORPS HAS NOT CONSIDERED THE BAY TO BE AN OFFICIAL USER OF FRESH WATER. THIS SITUATION SEEMS LUDICROUS, SINCE THE BAY WOULD NOT EXIST AS AN ESTUARY WITHOUT THE FLOW OF WATER FROM THE RIVER SYSTEM.

THERE IS CURRENTLY NOT ENOUGH INFORMATION ON HOW MUCH FRESH WATER THE BAY NEEDS TO REMAIN A PRODUCTIVE ESTUARY AND A MAJOR OYSTER RESOURCE. AN ESTIMATION OF THE FRESHWATER NEEDS OF THE BAY WAS TO BE INCLUDED IN AN ARMY CORPS OF ENGINEERS STUDY OF THE APALACHICOLA BASIN. HOWEVER, THAT STUDY HAS BEEN STALLED FOR SOME TIME AND THE CORPS HAS INDICATED IT NO LONGER HAS THE FUNDING TO COMPLETE IT. UNTIL A FRESHWATER NEEDS ASSESSMENT IS DONE, FLORIDA CANNOT ADEQUATELY REPRESENT ITS INTERESTS IN THE ALLOCATION OF WATER IN THE RIVER SYSTEM.

THE CORPS' PROPOSED CONTRACT WITH ATLANTA TO REALLOCATE WATER FROM THE CHATTAHOOTCHEE RIVER IS A SYMPTOM OF A MUCH LARGER PROBLEM THAT HAS EXISTED FOR MANY YEARS. THAT IS THAT THE CORPS' DECISIONS IN MANAGING THE RIVER SYSTEM HAVE NOT BEEN BASED ON A COMPREHENSIVE ASSESSMENT OF WATER NEEDS IN THE SYSTEM. WE CAN NO LONGER ACCEPT ALLOCATION DECISIONS MADE WITHOUT REGARD TO THEIR IMPACT ON THE ENTIRE SYSTEM.

THE APALACHICOLA BAY IS ONE OF THE MOST UNIQUE AND ECONOMICALLY VALUABLE NATURAL RESOURCES FLORIDA HAS. THE LOCAL ECONOMY DEPENDS ON IT AND THE STATE ECONOMY GREATLY BENEFITS FROM IT. OVER 95 PERCENT OF THE SEAFOOD SPECIES IN THE GULF OF MEXICO DEPEND ON AN ESTUARY AT SOME TIME IN THEIR LIFE-CYCLES. THE LOSS OF THE BAY THROUGH ALTERATION OF ITS ECOSYSTEM WOULD HAVE DEVASTATING IMPACTS ON FLORIDA AND ON THE GULF COAST GENERALLY. FOR THE REASONS I HAVE DISCUSSED, THE

APALACHICOLA BAY SHOULD BE DESIGNATED BY THE CORPS AS AN OFFICIAL USER OF FRESH WATER.

I URGE CONGRESS TO REQUIRE THE CORPS TO WORK WITH FLORIDA IN CONDUCTING A FRESHWATER NEEDS STUDY OF THE BAY, TO DESIGNATE THE BAY AS AN OFFICIAL USER OF FRESH WATER, AND TO DELAY ANY REALLOCATION PLANS UNTIL THE BAY'S NEEDS ARE ESTABLISHED.

THANK YOU FOR TAKING TIME TO LISTEN TO MY REMARKS. I HOPE YOU WILL TAKE THEM TO HEART.

Leavins
SEAFOOD, INC.
Apalachicola, Fla.

Post Office Box 596 • 32320
(904) 653-8823

GOOD MORNING,

My name is Grady Leavins. I am the President and CEO of Leavins Seafood, Inc. based in Apalachicola. Leavins Seafood, Inc. currently employs 40 people and services a customer base of 150 accounts throughout the Southeastern United States. Our primary product line is oysters, both as shucked oyster meats and as shellstock for the "oysters on the halfshell" market. We have continued to grow and improve our reputation in the seafood industry during the eighteen years we have been in business. I am a Director and Oyster and Clam Section Chairman for Southeastern Fisheries Association based here in Tallahassee.

Apalachicola Bay is known as one of the world's most productive in terms of oyster production. I have a chart prepared in 1988 by the National Oceanic and Atmospheric Administration that illustrates the oyster meats landings from various oyster producing estuaries. Please note Apalachicola Bay ranks thirteenth in acreage but second in production for the year 1984. Of the 115,000 acres of Apalachicola Bay approximately 40%, or 46,000 acres are suitable for growing oysters. The last figures I saw estimated oyster bars covered only 6000 acres of public bars and about 600 acres on private leases. These oyster bars produce 90% of the total of Florida oysters. For those of you who have never tasted an Apalachicola oyster, believe me, you are missing a delicacy, for there are none better. We, in Franklin County, have prided ourselves in protecting this great resource, to preserve the water quality. Oysters are filter-feeders, therefore, water quality is essential. Just as vital is water quantity. This graph shows the correlation between the flow rates of the Apalachicola River and oyster production in the bay. I'm not a scientist but I can see that decreased flow rates are related to decreased oyster production.

The flow rates of the Apalachicola are vital because oysters feed on the nutrients in the fresh water. Typically an Apalachicola oyster grows from a juvenile spat to a marketable 3 inch oyster in 18 months. My good friend Bob Ingle, who has done so much research on oysters in Apalachicola, has recorded oysters maturing in 14 months. I would like to show you something to support these growout rates. This clump of juvenile oysters was brought in to me this week. There are thirteen oysters in this small mass. What is remarkable is they were taken from the area of my oyster lease that we cultivated just two months ago. You cultivate an oyster lease by placing your residual shell from your shucking operation on barren bottom; this is called cultch material; the oyster spawn, release their larvae, called spat, and the spat attaches itself to the cultch material. If this is an indication of the spat recruitment combined with rapid growout to marketable size, then I can tell you we shall have a very successful harvest, barring a disaster. Decreased flow rates not only account for reduced nutrients but also create high salinity levels. High salinity levels stress the oysters, and account for greatly reduced shelflife and high oyster mortality rates. With increased salinity levels, the oyster predators, such as conchs and oyster drills, become more numerous and they have a negative impact on oyster production. For all of the research that has been conducted in Apalachicola Bay by Doc Ingle, DNR,

and others, I am sure there are publications that address these areas, and certainly they can do a better job of explaining them than I, so I will not belabor these points.

However, I would like to tell you of days gone by. Twenty years ago to be exact. I started oystering in Apalachicola Bay back then on weekends. I lived and worked in Panama City and came over on the weekends to oyster. I worked St. Vincent oyster bar and continued to for the next five years. There were so many oysters on St. Vincent that three of us working on one boat would start to work after daylight and by two in the afternoon we would have harvested 60 bushels of oysters and we did this for about five years. There have been times when I observed as many as 300 to 600 oyster boats at one time on St. Vincent, so many in fact, that it appeared you could step from one to another for the whole length of the oyster bar. St. Vincent now is almost non-productive as compared to fifteen or twenty years ago.

I have no date on river levels fifteen or twenty years ago, only my memory. I never remember the river readings being below six to eight feet at Blountstown, today it is less than two feet. Building reservoirs to retain even more water from coming down the Apalachicola river could have very serious economic impact on our industry.

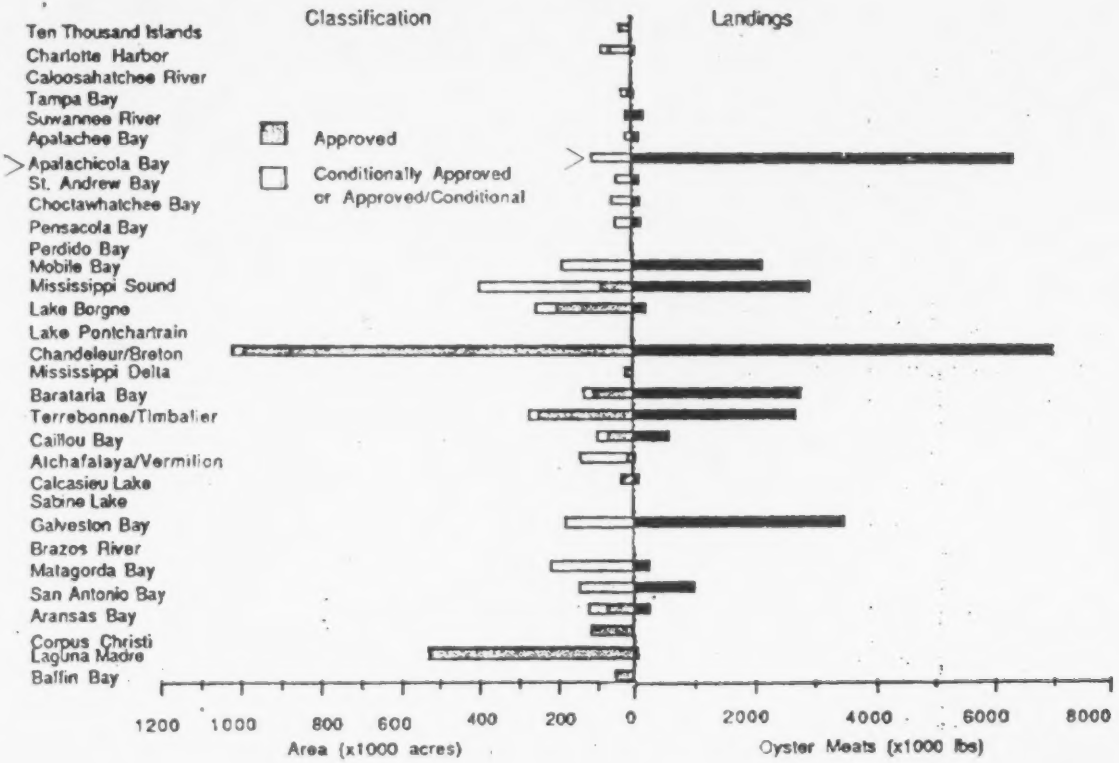
St. Vincent oyster bar may never be the same again, but it is not too late to save the other productive oyster beds in Apalachicola Bay. East Hole and Cat Point bars are currently the most productive beds in Apalachicola Bay. Fifteen to twenty years ago they were seldom worked because the quality of the St. Vincent oyster was superior, but now they are the mainstay of Franklin County. We cannot allow the bars to deteriorate the same way as St. Vincent.

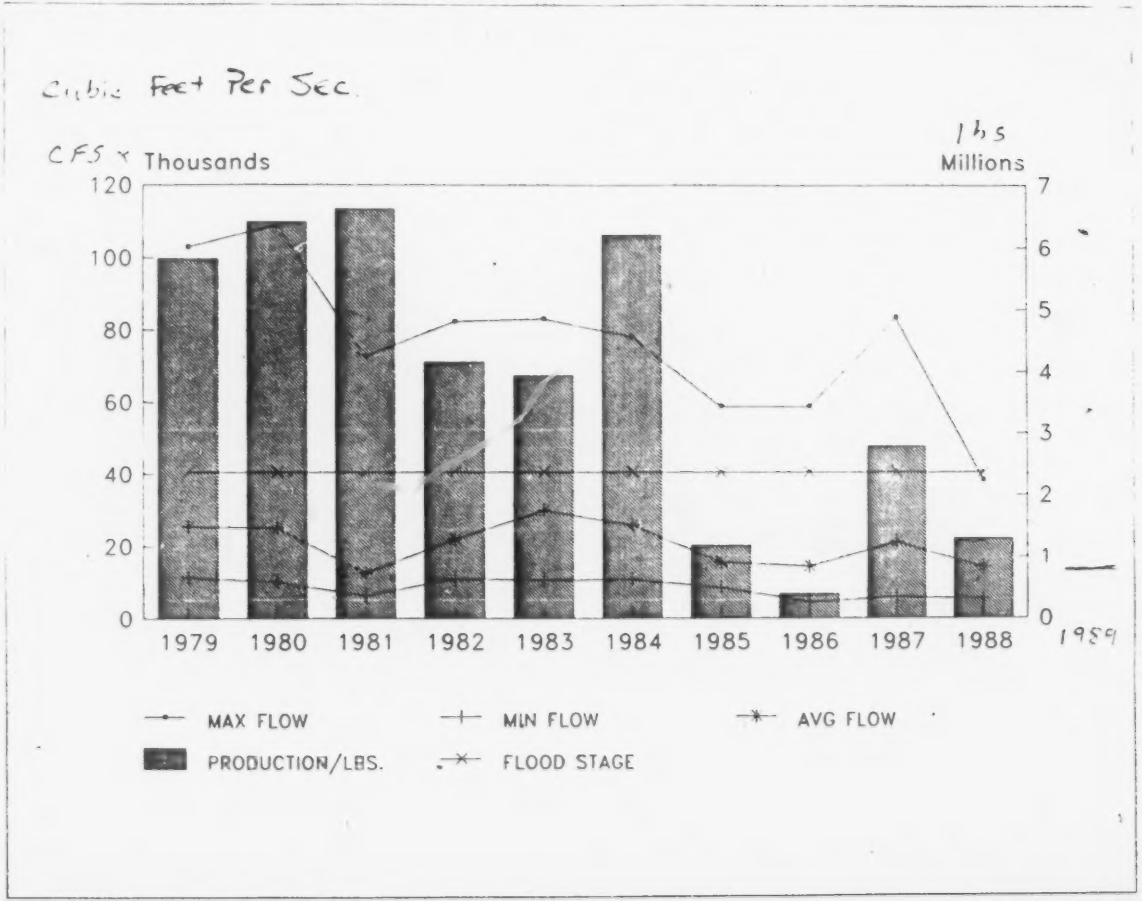
If it must be that another reservoir be built for water storage----then construct one for water storage for Apaalchicola Bay and the management of oyster reproduction and growth. The continued production of shellfish in Apalachicola Bay is to Franklin Countians as important as hydro-electric plants, farm land irrigation, recreational lakes, and drinking water is to our northern neighbors. Thank you for your attention.

Publication. 1988 NOAA

For the year 84

Figure 5. Classification and Landings by Estuary




Cubic Feet Per Sec.
CFS x Thousands
lbs Millions
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100
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1979
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1981
1982
1983
1984
1985
1986
1987
1988
1989
MAX FLOW
MIN FLOW
AVG FLOW
PRODUCTION/LBS.
FLOOD STAGE

APALACHICOLA·BASIN·PROJECT
FLORIDA·DEFENDERS·OF·THE·ENVIRONMENT·

STEVE LEITMAN, COORDINATOR

TESTIMONY PROVIDED AT THE U.S. HOUSE OF REPRESENTATIVES COMMITTEE ON PUBLIC WORKS AND TRANSPORTATION, SUBCOMMITTEE ON WATER RESOURCES FIELD HEARING, SEPTEMBER 29, 1990.

BY: Steve Leitman, Apalachicola Coordinator, Florida Defenders of the Environment.

Mr. Chairman, my name is Steve Leitman and I am the Apalachicola Coordinator for the Florida Defenders of the Environment. Florida Defenders of the Environment is a private, non-profit organization that has been actively involved in the protection of Florida's natural environment for the past 20 years. The primary focus of Florida Defenders of the Environment is to bring objective facts into decisions which can affect the environment.

The Apalachicola is Florida's largest river in terms of flow and is the lower portion of the Apalachicola-Chattahoochee-Flint drainage basin, a 19,600 square mile basin which drains into the Gulf of Mexico. The river is alluvial by nature and is a unique and important biological resource. The upper basin has the greatest number of endangered plant species for any comparable sized area in Florida and the highest species density of amphibians and reptiles on the continent north of Mexico. The floodplain has been cited as one of the more important wildlife habitats in north Florida and is one of the larger tracts of bottomland hardwoods in the southeast. The river has the most diverse assemblage of

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freshwater fish in Florida. Of the west Florida drainages (Escambia to the Suwannee), the Apalachicola contains the largest number of species of freshwater gastropods and bivalves, the most endemic species, and the greatest proportion of endemics to the total fauna. The river's wide, shallow estuary covers over 200 square miles. Throughout the early 1980s Apalachicola Bay provided about 90% of the state's and 10% of the nation's oyster harvest. It also provided sizable shrimp, blue crab, and fin fish yields. Annual seafood landings are typically valued in excess of $14 million dockside and the economy of the county surrounding the bay is dependent upon this yield. The estuary is also a major blue crab breeding ground for the entire west Florida coast and an important nursery area for penaeid shrimp.

I provide this testimony as someone who has had the honor of spending the past sixteen years working for state government, regional government, and now for a private environmental group on the conservation and protection of the natural resources of the Apalachicola basin. In these sixteen years I have seen the State of Florida and local governments put forth a considerable effort to conserve and protect this natural treasure and I am proud to have had an active hand in this endeavor. Tens of millions of dollars have been spent by state and federal government and by private concerns to purchase tens of thousands of acres of environmentally sensitive land. Local government has struggled with land development issues in an attempt to maintain its seafood economy. And, considerable sums of money have been spent, largely

under the leadership of Dr. R.J. Livingston, Florida State University, trying to understand how this productive estuary works from an ecological perspective.

Furthermore, in coordination with the federal government, the State has established the Apalachicola National Estuarine Research Reserve and bestowed on the area numerous other protective designations. The State, largely for conservation purposes, has also opposed several major construction actions in the basin. In the mid-1970s Florida rejected several proposals by the Corps of Engineers to dam the Apalachicola River for navigation purposes. Ironically, the most recently proposed dam would not have solved navigation problems in a stretches of river which currently have the most serious problems. The County adjacent to the estuary has taken steps to limit development in close proximity to the water.

The examples above are just a sampling of the commitment the State and its citizens have shown toward protecting this area. The river and bay play an integral role in the culture and lifestyle of many of the people who live in the basin.

Many years ago, it became apparent to those of us working to protect this area, that the flow regime of the Apalachicola River must be protected or all of our other efforts would be for naught. The high productivity of the estuary is largely the result of the relatively good quality of water in and physical form of the bay, the salinity regime as defined by the flow of the river, and nutrient/detrital transport from the river's floodplain. Or, in other words, it is the flow of the Apalachicola River that has made

the estuary so productive. The river's influence on the estuary is related both to the timing and quantity of water delivered. Since only 12.5 percent of the basin is in Florida, flow in the Apalachicola River is largely the result of rainfall, management actions, and consumptive demands upstream in Alabama and Georgia.

In reviewing the proposal to reallocate water in storage at Lake Lanier my major concern has not been whether this one action in and of itself would make a major a difference to the ecological welfare of the river and bay. In the real world actions such as the proposed reallocation do not happen by themselves. The proposed reallocation is merely one of many actions happening in the basin which can influence the flow into Apalachicola Bay. The key question of concern to me is what is cumulative effect of all withdrawals in the Chattahoochee and Flint basins, especially during periods of extreme low flows. If this estuary is to be maintained for our children and our children's children, the allocation of freshwater throughout the basin must consider all these demands in context to each other and must accommodate for the timing and quantity of water needed by the estuary.

The Florida Defenders of the Environment views the Lake Lanier proposal as a symptom of a much larger problem, the piecemeal management of water resources in the basin. The reallocation proposal and its resultant lawsuit provide us with what may very well be our last opportunity to do the right thing.

I personally have recognized the importance of basin-wide water management for over ten years. When Georgia and Alabama

opposed the designation of the Apalachicola estuary as a National Estuarine Sanctuary (currently called a National Estuarine Research Reserve) because they wrongly believed this designation could be used to block the federal navigation channel, I was instrumental in including as a condition for funding the Sanctuary a provision which required the states of Alabama, Florida, and Georgia to approach the Water Resources Council for funding to prepare a basin wide water management strategy. This proposal received the highest priority for new starts for such studies, but was never even begun because President Reagan abolished this Council.

When the Corps of Engineers and navigation interests approached the State to remove rock shoals in navigation channel of the upper Apalachicola River, Florida opposed this removal until the Corps and the States of Alabama and Georgia signed a Memorandum of Understanding with Florida in 1983 requiring the preparation of comprehensive navigation plan, a drought management plan, and a basin-wide water management strategy as well as creating a forum through which the states can coordinate on basin-wide water management issues. Although the rocks were removed and this agreement resulted in the preparation of the navigation plan and an interim drought plan, the desired basin-wide strategy was never prepared and the coordination forum has been largely ineffectual for the past four years.

The failure to successfully complete this earlier agreement is in a large part attributable to Florida entering into an agreement which relied heavily on mutual trust for completion. The

Florida Defenders of the Environment pledges to do everything in our power to assure that any negotiated agreements to the current lawsuit incorporate enforceable assurances to better guarantee successful completion.

The Florida Defenders of the Environment recognize the importance of addressing the water needs of Metropolitan Atlanta. We also recognize the importance of addressing all other water needs in the basin. And, these needs include the water needs of the Apalachicola estuary. We further recognize that if the State of Georgia and Metropolitan Atlanta had given the attention warranted to the successful completion of the earlier Memorandum of Understanding, The three states and the Corps would probably not be in a litigation mode at this time. We do not intend to impose an economic hardship on any upstream users. However, we also do not intend to have further hardships imposed on the ecological functioning of the estuary or upon Florida interests in the basin. We simply ask for the water resources of the basin to be managed in comprehensive and responsible manner.

Our prescription to remedy the current impasse is straightforward. We want a guarantee, not a promise, that the historical flow regime will be maintained. We have seen to many broken promises. We recognize that this may not always be possible because of extreme climatic events. During these events, we would like to see all interests share the burden and to not have the situation exacerbated by unrestrained consumptive demands upstream.

The Florida Defenders of the Environment is willing to accept a negotiated settlement to the current situation only if such a settlement is detailed, specific, and enforceable. Such an agreement should lead to an objective analysis of the water needs, demands, and supplies in the basin and result in its key findings being implemented into action. Such an agreement should also point toward specific conservation programs for municipal, industrial, and agricultural water users during low-water periods. And, such an agreement must establish a meaningful forum for communicating on basin-wide water management issues. The Florida Defenders of the Environment supports the concept of Apalachicola Bay becoming an authorized project purpose in so much as this authorization leads the bay actually being treated as an authorized project purpose.

The root of this problem is in our society's inability to appropriately value water. Our society tends to look at water as a free good which can be consumed or polluted at will in order to generate profits. The Florida Defenders of the Environment contends that this perspective is wrong. Water, in fact, is the life-blood of America and is of far greater value to our society than the paper we print up and call money. Considering all of the attention and money the State and the citizens of north Florida have spent on protection of the Apalachicola estuary, it will be a tragedy indeed if this natural treasure still may not be allowed to continue to provide its bountiful treasures to future generations.

Position Statement

Apalachicola National Estuarine Research Reserve
Florida Department of Natural Resources

Woodard W. Miley, II

The A-C-F system is a regional resource. Only through man's innovation do the names and management strategies change at political boundaries. Realizing this, the Governor's of Georgia, Florida, and Alabama appointed the Interstate Coordinating Committee in 1983. Florida participated in the ICC with the understanding of a partnership. This partnership involved the recognition of Apalachicola Bay as a user of fresh water on equal footing with other user groups.

Florida has shown a willingness to work with Georgia and Alabama. In 1984, navigation interests needed rock shoals removed from the upper Apalachicola. For fish and wildlife habitat reasons Florida initially opposed the removal. In the spirit of partnership, Florida permitted the project. In return, Florida was lead to believe that we would benefit through such vehicles as the 308 Study and the Navigation Maintenance Plan. Florida bargained for, and received, a commitment for recognition as a water resource user and cooperation in the development of basin-wide management strategies. Partnership implies more than one cooperator.

The Navigation Maintenance Plan for the A-C-F, prepared as a cooperative effort by the States of Alabama, Florida, Georgia, and the Mobile District of the C.O.E., was developed based on two goals. The first was to provide authorized project dimensions in a cost effective manner and in a manner which provides no net degradation of environmental resources. The second goal was to closely coordinate management issues on the system with appropriate parties. This plan, which was signed by members of the ICC representing the C.O.E. and the governors of the three states recognizes the Apalachicola Bay as a legitimate water user of the system.

Information from the C.O.E. states that Florida will continue to get the same amount of water to the estuary and that we "just don't understand". Although public water supply represents only 20% of the total withdrawals from the system, it is by far the most consumptive. The 1984 water assessment of the A-C-F basin shows that in 1980 only 51% of the public water supply withdrawn was returned to the system. By contrast, 67% of the total withdrawal was for thermoelectric production and 91% was returned to the system. Even in the unlikely event that we will get the same amount, it is they that don't understand. High seafood production in Apalachicola Bay is totally dependent on detritus, dead decaying plant material. The leaf litter that falls each year in the river swamp is the gasoline that runs the

engine in the bay. Without our annual winter and spring floods there would be no transport mechanism to deliver the vital nutrients to the system and the bay would, in effect, starve. Averaging out the annual flow, even if it were the same volume, would reduce seafood production in one of the most productive estuarine systems in the Northern Hemisphere. High river flows were experienced in 1979 and 1980 and 1980 and 81 were record oyster production years. 1981 was a drought year and 1982 oyster production was 2.5 million pounds less than 1981. 1983 was a high river flow year and oyster production doubled in 1984. Apalachicola Bay's dockside seafood value of 12-16 million dollars is the sole economic basis for the area. Our more subjective worth at the consumer level is 70-80 million dollars. Apalachicola Bay's oyster harvest comes from approximately 4% of our bay. We know from research that 40 to 50% of our bay could produce oysters, if oyster shell is placed there for attachment of young oysters. The extrapolation is rather than 4 to 6 million pounds of oyster meat per year, we could produce 150 million pounds. To put that production in perspective, 5 million pounds of meat would cover a football field 3 feet deep and 150 million pounds would cover the field 90 feet deep in the finest oysters in the world. With existing technology and growing interest in aquaculture, the oyster production of our bay is virtually limitless. A good natural oyster bar produces 400 bushels of oysters per acre per year. Aquaculture can produce 2500 bushels per acre per year. Even though the economic value of our local seafood industry is impressive, it doesn't come close to telling the story of the importance of the Apalachicola Estuary. Ninety-five percent of all commercial seafood species spend a portion of their life cycle in an estuary. Blue crabs, for example, travel as much as 300 miles to spawn in Apalachicola Bay. They spend their larval and juvenile stages in our marshes and then scatter all over the Gulf of Mexico. So do the shrimp and many kinds of fish. They are caught somewhere else, landed somewhere else, and are reflected in someone else's dockside value. That product would not be there if Apalachicola Bay was not productive.

Planning short term growth, relative to a finite resource such as water, for a dynamic metropolitan area like Atlanta is irresponsible. Projecting their water needs for 20 years will get present decision makers through their professional or political careers, but it passes a much more complicated problem on to the next generation of decision makers. Even if Atlanta were to use every drop of water available, they are still dealing with a finite resource and will have to face the problem.

There are several research projects currently underway to determine the fresh water needs of Apalachicola Bay. There is also strong support for basin wide management. For any one user group to advocate increasing their water allocation at the expense of others before the research data is complete is both presumptuous and premature.

Florida is entitled to historic flows from this system from any standpoint of analysis, whether the analysis is economic, environmental or moral.

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Birmingham, Alabama 35291-0001
Telephone 205 250-2880

Bill M. Guthrie
Executive Vice President

Alabama Power
the southern electric system

September 28, 1990

Committee on Public Works and Transportation
U.S. House of Representatives
Glenn M. Anderson, Chairman

Re: September 4, 1990, Meeting Notice The Subcommittee on Water Resources, Saturday, September 29, 199C, 9:00 AM, County Commission Chambers, 5th Floor, Leon County Courthouse, 301 S. Monroe Street Tallahassee, Florida

Dear Mr. Chairman:

Alabama Power Company is an investor-owned electric utility providing electric utility service to the citizens of the State of Alabama. The Company has an installed generation capacity of 9,878,815 kilovatts, which includes 1,720,000 kilovatts of nuclear plant capacity located on the Chattahoochee River, and 960,900 kilovatts of hydroelectric capacity located on the Coosa River. The recently announced proposals by the U.S. Army Corps of Engineers to reallocate water in storage at lakes Lanier, Allatoona, and Carters from hydro power to water supply creates the potential for significant impacts to the Company's operation of these plants. The impacts of such reallocation would include a direct reduction in hydroelectric generation from the Coosa River plants, resulting in an increase in the cost of electricity to the customers of Alabama Power, and could reduce flows on the Chattahoochee River below levels needed for adequate operation of the Farley Nuclear Plant. Thus, we respectfully express our appreciation for this opportunity to address our concerns on the downstream impacts of water supply allocation and management along the Apalachicola-Chattahoochee-Flint River Basin and the Coosa-Alabama River Basin to this Subcommittee.

In order to provide as much pertinent information as possible to this Subcommittee, the following comments will address specific points of concern which we have clearly expressed to the U.S. Army Corps of Engineers during earlier comment periods.

Coosa-Alabama River Basins

Alabama Power Company owns and operates seven hydroelectric plants on the Coosa River which total 960,900 kilovatts of capacity. These projects are directly affected by operations at Allatoona and Carters Reservoirs in the headwaters of the Coosa Basin. In addition to energy at these projects being dependent on river flows, our Federal Energy Regulatory Commissions licenses require us to maintain downstream flow augmentation from these projects for navigation on the Alabama River. We also are required to pay the United States Treasury substantial

amounts, through the Federal Energy Regulatory Commission, based on the Headwater Benefits procedure for flow regulation provided by the Allatoona and Carters projects. Thus, we have a vital interest in the reallocation process as it affects the water management at these two projects.

The Corps of Engineers has stated their intent to reallocate 50,000 acre feet of storage at Allatoona and 34,590 acre feet at Carters to water supply. Of these amounts it appears to us that a significant portion will be lost from the Coosa River, either to interbasin transfer, evapotranspiration, or groundwater loses. These potential losses are our primary concern, although several areas raise questions for us.

The consideration of hydrogeneration losses is limited to losses at Carters and Allatoona and does not include loss in energy at Alabama Power Company plants on the Coosa River, or Corps of Engineers plants on the Alabama River. Since downstream conventional generating capacity greatly exceeds at-site capacity, the exclusion of downstream losses fails to consider the largest potential impact on generation in the evaluation process. Based upon initial Corps estimates of 12,205 MWh's of loss at Allatoona, and 5,585 MWh's of loss at Carters due to the reallocation, we estimate that as much as 36,000 MWh's would be lost at downstream APCo Coosa River plants each year. This translates to a present worth energy replacement cost to Alabama Power of about twenty (20) million dollars, and would increase electric rates to our customers. Although the Carters reallocation quantities have been recently reduced, the resolution of downstream hydro losses has still not been addressed.

The reallocation process ,as described by the Corps of Engineers, stipulates that 50,000 acre feet or 15% of usable storage, whichever is less, can be re-allocated for water supply. On the surface it would appear that 15% of usable storage would be a relatively small fraction. However, "usable storage" is defined in the reallocation procedure to include flood control storage which represents only a temporary storage of water, unused and unavailable during low flow times when water supply storage is required. Inclusion of flood control storage in the calculations in no way reflects an amount of storage that can be viewed as a dependable source of water supply. The only way this could be assured would be through the permanent reallocation and designation of a fixed quantity of the flood zone for this purpose. However, this was eliminated by the Corps as a viable alternative due to its compromise on project flood control effectiveness. This inconsistent treatment should be addressed before any reallocation of these projects is given any further consideration. Otherwise, greater quantities of water supply reallocation are authorized, thereby increasing the impacts downstream.

The Headwater Benefits procedure, as provided for in section 10(f) of the Federal Power Act, requires that downstream licensee-beneficiaries of upstream headwater regulation pay an apportioned share of the joint-use project costs which provide such benefits. Alabama Power Company, as a licensee under the Federal Energy Regulatory Commission,

regularly is billed by the FERC and pays for energy gains at its Coosa River projects, with the basis of the charges being the apportionment of joint-use costs for the Allatoona and Carters projects. As a minimum, the Allatoona and Carters reservoir costs will need to be reassessed to properly apportion joint-use costs to water supply, flood control, power storage, and other appropriate purposes. Only by such a complete reassessment will future Headwater Benefits charges to Alabama Power Company be on a proper basis.

As in the case of Allatoona, the Carters project reallocation is based on 15% of usable storage. The computation considers flood control storage and power storage associated with a fifty foot drawdown, i.e. from el. 1072 ft. msl to el. 1022 ft. msl. However, the "balance point" mode of operation as described in the Carters Reservoir Regulation Manual limits power drawdown to about four feet. Thus, consistent with our previous comments on the flood control zone, it is inappropriate for the reallocation computation to be based upon "usable storage" which is in fact not usable.

Navigation was included as a project purpose in the authorization of Carters and Allatoona. Our licenses require that we coordinate with the Corps in support of navigation on the Alabama River. We presently have a joint minimum flow agreement in effect to satisfy this requirement. However, it became necessary to reduce the flows set forth in this agreement in 1986 and 1988, with subsequent disruption to navigation. Alabama Power projects on the Coosa and Tallapoosa Rivers should not be considered as a source of additional support for navigation flows to replace the loss of such storage in Carters and Allatoona resulting from the proposed reallocation. In actuality, we expect that the present minimum flow requirements in support of navigation flows for the Alabama River will be reduced proportionately to the reduction in storage at Allatoona & Carters. Studies performed to date do not address this impact on navigation flows.

Chattahoochee-Flint River Basin

Of most immediate concern to Alabama Power is the impact which changes in water allocation may have on the Company's Joseph M. Farley Nuclear Plant. The Corp's Draft Post Authorization Change Notification Report for the Reallocation of Storage from Hydropower to Water Supply at Lake Lanier, Georgia does not adequately address the potential consequences that the reallocation proposal and Water Control Plan would have on that facility because the Company was not contacted by the Corps for input prior to issuance of the Draft Report. As a result, the consumptive use of water by the Farley Nuclear Plant was not considered in the models used by the Corps to develop the proposed plan or to evaluate the results that would flow from the implementation of the plan. We would urge the Corps to develop further studies that evaluate the consequences to all who use the ACF river system. These studies should, of course, incorporate present and future water requirements of the Farley Nuclear Plant, as well as other downstream users, in order to assure that all affected interests are balanced.

Farley Nuclear Plant, located on the west bank of the Chattahoochee River at river mile 44.3, utilizes the Chattahoochee River for cooling and make-up water and is dependent in its operations on the availability of water of acceptable quality and quantity. Operation of the Farley Nuclear Plant could be impacted significantly by implementation of any plan which would possibly reduce either the elevation or the flow rates of the River adjacent to the Plant. The drought years of 1986 and 1988 lowered the elevation of the Lake Seminole reservoir significantly. The level reached a point that approached the minimum level evaluated for operation of the Plant. Implementation of plans that could result in even lower flow rates or river elevations during an extended drought increases the possibility of operational restrictions. Such limitations on the Plant's operation could impose significant costs in terms of replacement electric power, and could cause significant environmental concerns. The reallocation proposal combined with the WCP for reservoirs in the ACF basin should be examined under low flow or drought conditions to address this issue.

The impact of possible increased siltation resulting from variation in flow rate and elevation of the ACF system is not sufficiently addressed in the Report. Increased need for dredging operations and river water system maintenance could have environmental and economic impact not only on the Farley Nuclear Plant but on the many municipal, industrial, and agricultural withdrawals of water from the lower ACF basin. navigation-uses of the ACF river system have already exceeded the system's capabilities. Although the system is designed to provide a nine foot navigation channel, existing minimum flow characteristics are such that this channel depth can only be maintained 78 percent of the time below Jim Woodruff Dam on the Apalachicola River. The reallocation proposal and WCP should be examined for possible increases in siltation and impacts on water withdraval and navigation.
The Draft Report fails to give adequate consideration to the environmental and economic consequences of the plan on downstream users. Therefore, the Finding of No Significant Impact is not supported by the current Environmental Assessment. The proposed plan and its undefined impact on downstream uses may cause significant effects on the environment. Before any proper Environmental Assessment can be made, the Corps should conduct additional studies of the effects of implementation of the proposed plan. We are not certain what the consequences of such studies would be and do not project the outcome; however, in view of the potential harm that could be caused, it is certainly in order for additional studies to be performed.

In summary, our primary concern is that the Draft Report does not adequately address possible impacts on the present or future operational needs of the Joseph M. Farley Nuclear Plant. We are also concerned that studies to date have given very little consideration to the needs of municipal, agricultural, and other industrial users of the ACF system downstream from Lake Lanier and to the environmental and economic consequences that may flow from the proposal. The ability of downstream water users to grow and prosper in a healthy environment should be considered and balanced with the interests of upstream users.

Implementation of the WCP and reallocation of limited water resources should not be dictated without careful and objective analysis of the total economic, environmental, and social consequences.

Alabama Power Company appreciates the opportunity to express its concerns regarding downstream impacts from water supply allocation. We are pleased that this Subcommittee will assure that comprehensive and adequate studies are performed which carefully evaluate these downstream impacts.

Respectfully submitted,

Bill M. Guthrie

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Panel V

September 29, 1990
Testimony before the U.S. House of Representatives'
Subcommittee on Water Resources
of the
Committee on Public Works and Transportation

Pat Stevens
Chief, Environmental Planning
Atlanta Regional Commission
3715 Northside Parkway
200 Northcreek, Suite 300
Atlanta, GA. 30327

I appreciate the opportunity to come before you today to discuss one of the most critical issues ever to face the Atlanta Region. This Region's long-term water supply is the pivotal issue on which rest the future economic viability of the Atlanta Region and to a large degree, the State of Georgia. We believe the best solution for our water supply is the reallocation of Lake Lanier, GA. Today I would like to tell you how we came to that conclusion and how we think it will not impact downstream needs.

What is Reallocation

Reallocation is a proposal to change or "reallocate" a portion (20 percent) of the water storage in Lake Lanier that is currently reserved for hydropower generation - and earmark it for water supply. Reallocation of Lake Lanier was recommended by the Corps of Engineers in 1989 as the best method to provide for the current and future water supply needs of both the Lake Lanier communities and the Atlanta Region through the year 2010. This alternative would meet this area's water needs in the most cost-effective and environmentally sound manner, and would not significantly impact other users of the river system.

Reallocation will primarily change the timing of releases of water from Lake Lanier. Large surges of water are currently released to produce hydroelectricity a few hours a day on weekdays and very little is released at other times and on weekends when water supply demands are high. Reallocation will smooth out the release pattern from Buford Dam by reducing peak hydropower releases and increasing off-peak releases. In addition, reallocation will provide for withdrawals directly from the Lake for surrounding lake communities.

Water Resources Background

The Atlanta Region obtains most of its water from a river system which is a valuable resource to many people. The headwaters of the Chattahoochee River begin above Helen in the north Georgia mountains. As the river flows south it is impounded by Buford Dam to create Lake Lanier, flows through the Atlanta Region and runs along the Alabama border. Many people are not aware that the border between the states of Georgia and Alabama lies on the Alabama side of the Chattahoochee rather than down the center of the river. The Chattahoochee then meets the Flint River north of the Florida line, where the two rivers merge to form the Apalachicola River. The Apalachicola flows through the Florida panhandle to the Gulf of Mexico.

Along the river system are five federal dams and 11 private dams. The land that drains into these rivers or their tributaries is called the watershed or river basin. The Apalachicola-Chattahoochee-Flint (A-C-F) River Basin covers 19,800 square miles of which 14,500 (73.23%) are in Georgia, 2,800 (14.14%) are in Alabama, and 2,500 (12.63%) sq. mi. are in Florida. The amount of water that flows into the rivers depends on rainfall and the land area that catches the rainfall. In the A-C-F River Basin, most of the water in the rivers originates in the State of Georgia.

The Atlanta Region's streams are generally small-except for the Chattahoochee River - because of its location on a sub-continental divide. Groundwater is also limited since the Region rests on crystalline rock such as Stone Mountain granite. The Chattahoochee/Lake Lanier system is the only major source of water available to the Atlanta area and the Region is dependent on it for about 80 percent of its water supply.

How Much Water is in the Apalachicola-Chattahoochee-Flint River System

On the average about 1,300 million gallons per day (MGD) flow in the Chattahoochee River just below Lake Lanier. Even after the Atlanta Region's use, the average flow 40 miles down river at Whitesburg, Georgia nearly doubles to 2,500 MGD. Moving on downstream, the river continues to grow and at Columbus the average flow is 4,300 MGD. By the time the river flows by Columbia, Alabama, its size is four times that at Atlanta. Just after the Chattahoochee River meets the Flint at the Florida line, the average flow is about 14,000 MGD. About 45 percent of this flow is from the Flint River. When the combined Chattahoochee and Flint rivers finally empty into the Gulf of Mexico as the Apalachicola River, the flow has grown to more than twelve times what it was just below Lake Lanier for an average of 16,680 MGD.

During low flow periods these flows can be substantially less. For example, in the drought of 1983 annual flows in the River were 50 percent less at Atlanta, 45 percent less at Columbus, and 29 percent less just before the Apalachicola emptied into the Gulf.

Reallocation History

The Atlanta Region would have stopped growing years ago had it not been for the vision of leaders like Mayor Hartsfield of Atlanta and Senator Richard Russell who planned and then achieved the construction of Buford Dam and Lake Lanier. The Buford Dam/Lake Lanier project is a federal Corps of Engineers project which releases water into the Chattahoochee River. It was authorized by Congress in 1947 and built between 1950-1957 for navigation, hydropower, flood control, and water supply/water quality for Atlanta. Since then, recreation has become a major use of the project.

The original authorization documentation for Buford Dam clearly indicates that water supply and water quality for the Atlanta Region was a purpose of the project. Further, documentation shows that increased offpeak releases for future Atlanta Region water withdrawals was fully intended for the project. We now need and are ready to fully realize the vision of our former leaders.

Our efforts have a long history. In 1972, Congress authorized the Metropolitan Atlanta Water Resources Management Study (MAWRS) to develop a long-range water supply management plan. The study verified that, indeed, the Lake Lanier/Chattahoochee River

was the only reasonable major source of water for the Atlanta Region and studied many alternatives for its management.

Since off-peak flows in the Chattahoochee River were already becoming inadequate, the first outcome of MAWRS was to set up temporary arrangements to increase off-peak releases (those other than hydropower) from Lake Lanier while a permanent solution to provide for the Atlanta Region's water needs was studied. Temporary arrangements were first put in place in 1975.

The most recent temporary contracts expired in 1989 and another temporary agreement to supply the metro Atlanta area with its current water needs has been prepared by the Corps. Reallocation will be a significant part of the permanent solution for the Atlanta Region's water supply.

In 1981, the MAWRS study recommended that a reregulation dam be built below Buford Dam, provided that water quality and other environmental concerns could be addressed. The reregulation dam was a small dam on the Chattahoochee River below Lake Lanier designed to capture weekday hydropower surges from Buford Dam and re-release them at other times in a manner more suited to water supply use. The reregulation dam was authorized in the Federal Water Resources Act of 1986 with conditions that environmental concerns and economic issues be evaluated in more detail prior to construction approval. Strong environmental opposition to the reregulation dam existed.

Subsequently, more detailed economic and environmental studies by the Corps of Engineers during 1984-1988 resulted in the reversal of the 1981 recommendation. The Corps' 1988 recommendation is to change or reallocate 20 percent of the water stored in Lake Lanier from hydropower use to water supply use. The reallocation plan will meet the water supply needs of the Atlanta Region and other Lake Lanier users to the year 2010.

Need for the Reallocation of Lake Lanier

It is important that the reallocation of Lake Lanier take place soon. We need a permanent solution in place so the the Atlanta Region can be assured that its investments in the future are secure.

The Atlanta Regional Commission forecasts continued, healthy growth for the Atlanta Region through the year 2010. From a current population of over 2.4 million, the Region is expected to be home to more than 3.7 million people in the year 2010. Jobs are forecasted to grow from about 1.4 million today to over 2.3 million over the next 20 years.

The ARC Regional Water Supply Plan forecasts that even with a strong water conservation element, that in the year 2010 an average of 580 MGD of water will be needed to serve our Region and that 83 percent of this water will need to come from the Chattahoochee River/ Lake Lanier system. It is clear that without a secure, long-term water supply plan such as reallocation of Lake Lanier, that the Region's future growth potential will not be realized.

The Region, the State, the Southeast, and with the Olympic decision last week - the entire country - has much to loose without an assured supply of water for Atlanta. If a permanent solution through reallocation is not put in place, growth will be curtained. This would impact the entire State of Georgia which stands to lose 680,000 jobs, $127 billion in wages, and $8.2 billion in State revenues between now and the year 2010.

3

How Much Water is the Atlanta Region Using Now and How Much More Does the Reallocation Proposal Provide

The Atlanta Region's public water supplies currently can withdraw an annual average of about 251 million gallons per day (MGD) from the River and 55 million gallons per day from Lake Lanier. This includes River withdrawals by the City of Atlanta, the Cobb-Marietta Water Authority, DeKalb and Fulton counties, and lake withdrawals by Gwinnett County and the City of Buford. In addition to providing water to their own jurisdictions, these agencies provide water to nine other counties and more than 20 other cities.

Actual use during recent years has been less than allocated due to drought restrictions in '86, '87, and '88, and an unusually wet year in 1989. Unanticipated infrastructure problems in Atlanta, DeKalb and Fulton counties prevented full use of allocations again in 1990. Usage from the River is averaging about 230 MGD and 48 MD from the Lake. Claims that our requests for additional water are more than needed are incorrect due to a lack of understanding of recent conditions and the needs of public water supply systems.

Withdrawals don't represent consumptive use since a large part of the water withdrawn from the system in the Atlanta Region is treated and returned to the River. Wastewater treatment plants returned 211 MGD in 1988 and 225 MGD in 1989 to the River. This means that about 80 percent of the Atlanta Region's current withdrawals are put back in the River. Actual consumptive use from the Chattahoochee River/Lake Lanier due to the Atlanta Region in 1988 was 64 MGD and in 1989 was 47 MGD.

By the year 2010, Atlanta Region water demand forecasts call for an additional 128 MGD annual average from the Chattahoochee River and 50 MGD from Lake Lanier for the Atlanta Region over current allocations. The reallocation plan will provide for a portion of our existing withdrawals and future needs. When current and future allocations are added together, the total for the Atlanta Region is 379 MGD average from the River and 105 MGD from the Lake in the year 2010. Additional water for other lake communities of about 16 MGD has also been requested in the reallocation plan, for a total of 46 MGD in the year 2010.

Also, by the year 2010 wastewater treatment plans call for 358 MGD to be treated and returned to the Chattahoochee River. Therefore, consumptive use due to the Atlanta Region in the year 2010 will be 126 million gallons per day (379 + 105 - 358). This means that 74 percent of the water withdrawn by the Atlanta Region will be put back in the river. When withdrawals by others in the basin are included the return rate is 72 percent.

How Much will the Downstream Flows be Reduced Due to Atlanta Region's Future Use

The level of river flows in the Chattahoochee River are actually determined more by the manner the Corps of Engineers operates the dams on the river rather than the Atlanta Region's water use. A recent Corps report showed that flows downstream will increase in the future due to operational plans with reallocation. However, for purposes of illustration, the Atlanta Region's water use in the year 2010 can be imposed on historical average and drought river flows as follows.

In the year 2010, under average conditions the Chattahoochee River's flow will only be reduced due to the Atlanta Region by 5 percent% at Whitesburg, Georgia, 3 percent at Columbus, 2 percent at Columbia, Alabama and 1 percent at Chattahoochee, Florida, and less than 1 percent before the Apalachicola empties into the Gulf of Mexico. Even under worse case conditions such as 2010 demands and low river flows caused by drought such as 1988, the Atlanta Region's use amounts to 9 percent at Whitesburg, 5 percent at Columbus, 3 percent at Columbia, Alabama, and 1 percent at the Gulf of Mexico. The Atlanta Region's commitment to water restrictions in severe droughts as in 1988 will prevent such worse case examples from occurring.

The Atlanta Region has a right to reasonable use of the water resources of this area. The amounts of water discussed above are reasonable amounts for the largest metropolitan area in the southeastern United States. The reallocation of Lake Lanier will provide for this use to the year 2010.

Recent Activities in the Pursuit of Reallocation

When the Corps announced the change to reallocation we were concerned about our loss of momentum and additional delays in securing a long-term water supply. However, since our primary goal is to supply the Atlanta Region with a cost-effective and environmentally sound water supply -- leaders in the Atlanta Region threw their support behind the reallocation of Lake Lanier. We have been pursuing several courses of action to achieve our goals.

The first course of action was locally drafted and initiated federal legislation. A primary challenge with local legislation was the value associated with the displaced hydropower and the treatment of agencies currently benefitting from the hydropower. In 1989, the Atlanta Regional Commission held many meetings with local water utilities, state officials, and hydropower interests. A negotiated price of $62.5 million dollars for 238,000 acre feet of storage was reached. Legislation was drafted and presented to the Georgia Congressional delegation in hopes that it would be included in the 1990 Water Resources Act. It was not included in any of the bills.

The second course of action has been to support the Corps of Engineers as they work through their procedures for reallocation. In October of 1989 the Corps produced a draft Post-Authorization-Change Report (PAC), and in November of the same year held a series of public hearings in Georgia, Florida, and Alabama. Public concerns and false perceptions regarding the impacts to water quality, water supply downstream, navigation, recreation, economic development, and other upstream and downstream users have caused the reallocation proposal to become a controversial project. The PAC report has also helped focus many anti-Atlanta and anti-Corps sentiments, most of which have little to do with reallocation itself.

Wise Resource Management

Recognizing the importance of good stewardship of our precious water resource, the State of Georgia, the Atlanta Regional Commission, and local governments in the Atlanta area have been working on and requiring water conservation for over ten years. Water conservation measures in the Atlanta Region include low-flow plumbing fixture requirements, water conservation based on pricing, education, low-water using landscaping, education,

retrofit packages, low-water using landscaping policies, and an industrial policy which discourages water intensive industries from locating in the Atlanta Region.

ARC's water demand forecasts take water conservation into account by reducing water use factors in the future. Our water conservation-based forecasts coupled with the State of Georgia's water management and permit program insure that this water resource is shared in a responsible manner.

Impacts of Reallocation
The U.S. Army Corps of Engineers has determined that the impacts of reallocation are minor and insignificant. Impacts to downstream users, even in worst case conditions, are shown to be insignificant in the Corps' work.

Many of the fears of other users of the system are based on perceptions and not necessarily on fact. Examples include:

Apalachicola Bay
The State of Florida objects to the reallocation because it believes that impacts to the Apalachicola Bay were not considered and that reallocation of Lake Lanier presents potential harm to fish and wildlife resources in Florida's River and Bay system. This is not true. Impacts to the Apalachicola Bay were considered in the Corps work. The U.S. Fish and Wildlife Service (Panama City, Florida office) letter to the Corps of Engineers concurs with the Corps Post Authorization Report and favorably considers the project. It should be noted that the U.S. Fish and Wildlife Service previously opposed other alternatives for Atlanta such as a reregulation dam. We believe that additional concerns of Florida relate more to how the Corps will operate the dams on the A-C-F system and are being confused with the Atlanta Region's use of water through the reallocation of Lake Lanier.

Consumptive Water Loss
Downstream users concerns that Atlanta will consume all the water and prevent their future growth are unfounded. This concern is probably due to the large numbers included in the reports for Atlanta's water supply. However, what most people don't realize is that most of this water will be used, treated, and put back in the Chattahoochee River.

The reallocation plan will be a permanent solution to a portion of our existing withdrawals and our future needs. As mentioned earlier, when current and future allocations are added together, the total withdrawal for the Atlanta Region would be 379 MGD average from the River and 105 MGD from the Lake. Seventy four percent (74 percent) of this water will be treated and returned to the Chattahoochee River.

Consumptive water losses in the year 2010 due to such things as lawn watering etc. in the Atlanta Region will amount to 126 MGD. This will result in only three percent less water at Columbus, Georgia, and 0.8 percent less water at the Florida state line under average conditions than if consumptive losses were 0. This is reasonable use.

The level of river flows in the Chattahoochee are determined more by weather conditions in the rest of the basin and how the Corps releases water from all of the

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projects rather than how much water the Atlanta Region uses. The Atlanta Region's use is a small percentage of the water in the system.

Navigation
In some respects navigation will improve with a change in releases from Buford Dam. The river will fall below the minimum level needed for navigation (6.5 ft.) less often under reallocation and would be between 6.5 and 9.0 ft. (at which time lighter loads can be hauled) more often than during historical record. Under reallocation the river levels would drop below the full depth for navigation during droughts only an additional four days. The full depth (9ft.) would be obtained under reallocation for 77 percent of the time versus 78.1 percent during historical record.

Water Quality
Reallocation will not impact water quality. EPD requires that 750cfs be maintained below Atlanta at all times. Requirements for additional clean-up of Atlanta's wastewater are progressing, including treatment for Combined Sewer Overflows and additional phosphorus removal at treatment plants. Water quality is expected to improve in the future.

Lake Lanier
Probably the biggest, but still minor, impact will result at Lake Lanier. Under worst case scenario of 2010 water demands, and no water restrictions or conservation during droughts, the reallocation would result in levels below 1066' for 16 percent of the time over historical record during the recreation season. The Corps estimated that during the 1980's reallocation would have resulted in a 0.9 percent decrease in visitor days. We feel this is minor, especially considering the report did not take into account the water restrictions that would be adopted during a drought. Also, future population growth was not considered in the recreation analysis. Even though some users may go elsewhere, new population will cause the loss to be filled.

Opposition

Alabama is opposed to reallocation because it believes that it will preclude its use of water for economic development.

In the fall of 1989, Representative Tom Bevill used his influence over the Corps of Engineers to direct them to develop another study. This study will be a year 2040 study of the Coosa and Apalachicola-Chattahoochee-Flint River Basins. It appears to us that this study proposes to restudy the reallocation of Lake Lanier. The study also proposes to study many other aspects of water resources such as water quality standards and the Georgia Regional Reservoir program. The study would take a minimum of four years and $6 million. Eight years is a more realistic estimate for such a study. Language in the study plan and appropriations' legislation states that this study would form the basis for the allocation of water in the basins.

What this means to us is that Alabama is trying to set the stage to halt all growth in the Atlanta Region by the mid-1990s. Reallocation could be delayed for 10 years. If Alabama prevails, the long-term damage to the Atlanta Region's economy will be devastating and perhaps irreparable. We are on the threshold of establishing Atlanta as a global marketplace which will benefit the entire southeastern United States. The State of Alabama

has filed a lawsuit and has been joined by the State of Florida to prevent the Corps from entering into any agreements for Atlanta's water supply.

It is very hard for those of us in the Atlanta Region to comprehend how Alabama and Florida can delay the Atlanta Region's use of its own water and how the Corps can support another study to contribute to this delay. The facts of this matter do not support such actions.

The Atlanta Region's future supply has been studied by the Corps of Engineers since 1972, and all studies have shown that the water should come from the Chattahoochee River/Lake Lanier system.

Even Congress concurred with this water supply source when it approved the reregulation dam in 1986. The only major difference between the reregulation dam and the reallocation of Lake Lanier is that changing the release patterns of Buford Dam is far less environmentally damaging than building a reregulation dam to do the job.

It is also very hard for us to understand how Alabama and Florida object when we see that our use is such a small percentage of flows in the system, even in drought times. We suspect that the quarrel may be more about how the Corps actually operates their dams, and the Atlanta Region is getting caught in the crossfire.

Florida's Concerns

It appears to us that the Florida DNR and DER staff also are aware that the Atlanta Region's use of Chattahoochee River/Lake Lanier water will not impact the resources of the State of Florida but must oppose reallocation because the Corps of Engineers has included a Water Control Plan in the report which does not address Florida's concerns about Corps operations.

ARC supports the State of Florida's recommendations that any Corps of Engineers operating procedure (such as the WCP) for the A-C-F basin consider the protection of the fish and wildlife resources of Apalachicola Bay. The commercial and recreational fishery in the Bay is important to the citizens of Georgia, as well as those in Florida. ARC supports the State of Florida's Department of Natural Resources recommendation in their November 28, 1989, letter to the Corps of Engineers that the Corps could proceed with the PAC if the Water Control Plan was considered separately.

ARC believes it was inappropriate to include the Water Control Plan in the PAC report and that reallocation will have no impact on the Apalachicola Bay if the Corps of Engineers would place more emphasis on protection of the Bay in its operating procedures.

Summary

The Atlanta Region has been working in good faith for nearly twenty years with the appropriate federal agencies to secure a long-term water supply for the Atlanta Region. Many options have been examined. Out of these options-reallocation of Lake Lanier has been chosen as the best alternative by the Corps- because it will supply Atlanta's water through 2010 in the most cost-efficient, environmentally sound manner and without detrimentally impacting other users of this resource. Atlanta Region leaders feel enough study has been done, enough money spent. If the economic engine of the Southeast is to

continue to run - it must have a reliable water source, and soon. We see absolutely no reason for further delay and ask you to move ahead to approve reallocation of Lake Lanier with swift action.

20 September 1990

TESTIMONY TO

SUBCOMMITTEE ON WATER RESOURCES
OF THE
COMMITTEE ON PUBLIC WORKS AND TRANSPORTATION

TALLAHASSEE, GEORGIA
29 SEPTEMBER 1990

BY

COLONEL MICHAEL F. THUSS
U.S. ARMY CORPS OF ENGINEERS
MOBILE DISTRICT

I appreciate the opportunity to appear before this Subcommittee today representing the Secretary of the Army. I will provide testimony on the efforts of the U.S. Army Corps of Engineers (Corps) in evaluating and addressing the current and future water supply needs of the Atlanta region. In order to place the Corps' involvement in water supply into perspective, I will give you a short history of water resources developments in the Apalachicola-Chattahoochee-Flint (ACF) Basin. Then I will bring you up-to-date on the reallocation proposals by the Corps to address water supply needs in the basin.

The Corps has long been involved with the planning and implementation of water resources projects in the ACF Basin. The first published Corps report on recommended improvements in the basin was for navigation on the Apalachicola River in 1872. This was followed by many other reports for shallow draft navigation.

Section 1 of the River and Harbor Act of 1927 authorized surveys for the comprehensive development of the water resources of selected river basins in the United States, including the Apalachicola River and its tributaries. This gave rise to the first published report on the basin of a comprehensive nature which was submitted to Congress on June 16, 1939. This report, which was published as House Document No. 342, 76th Congress, 1st Session, recommended approval of a general plan for the full development of the ACF River system for the following purposes: flood control, navigation and hydroelectric power. Specific improvements were authorized later by the 1945 and 1946 River and Harbor Acts and the Flood Control Acts of 1962 and 1963.

Jim Woodruff Lock and Dam was completed in 1957 for the purposes of navigation and hydropower. Buford Dam was completed in 1958 for the purposes of navigation, hydropower, flood control, water supply and water quality. The Walter F. George project was completed in 1963 for navigation and hydropower purposes. The George W. Andrews project was also completed in 1963 for the purpose of navigation. West Point Dam was added in 1975 for the purposes of navigation, hydropower, flood control, recreation, and fish and wildlife. Recreation is also considered a project purpose at each of the other projects by virtue of the Flood Control Act of 1944, the Federal Water Project Recreation Act (Public Law 89-72), and the recreational developments that have been constructed. In addition, fish and

wildlife management is considered a project purpose at the Buford and Walter F. George projects.

Two important laws have been passed which are the basis for the Corps' involvement in evaluating and meeting the water supply needs of the Atlanta region. The first law was the 1944 Flood Control Act which authorizes disposal of surplus water available at Federal reservoirs for domestic and industrial uses. Surplus water is defined as water that is excess to the requirements of the authorized project purposes. The second important law was Section 301 of the River and Harbor and Flood Control Act of 1958 (also known as the Water Supply Act of 1958) which provided that storage may be included in Federal reservoirs for present and future municipal or industrial water supply. However, modification of existing projects for water supply that would significantly affect project operations or existing project purposes would require further Congressional authorization, such as the proposed reallocation for Lake Sidney Lanier.

House Document 300, 80th Congress, the basis for Congressionally authorized development of the ACF Basin, also outlined the need for a dependable water supply for the Atlanta region as a prerequisite for economic growth. During the early 1940's, civic leaders for the City of Atlanta strongly urged that the 1946 River and Harbor Act authorize the construction of one or more reservoirs upstream of

Atlanta in order to meet a threatened shortage of water for municipal and industrial purposes during low-flow periods. A multipurpose headwater reservoir was also needed for the economical operation of the proposed developments below Columbus by providing flow regulation during low-flow periods. The approval of the Buford Dam site accomplished both of these needs. Operation of Buford Dam has greatly augmented the minimum flow in the Chattahoochee River at Atlanta, thereby producing considerable benefits by reinforcing and safeguarding the water supply of the metropolitan area.

In the early 1970's, officials for the State of Georgia and the Atlanta Regional Commission recognized that the population and economic growth experienced by the Atlanta region could not be maintained or continued without additional provisions for dependable water supply in the future. The Senate Public Works Committee on March 2, 1972, authorized the Metropolitan Atlanta Area Water Resources Management Study (MAAWRMS). The purpose of this study was to develop a framework plan for the orderly development of the water and related land resources for the Metropolitan Atlanta area to beyond the year 2000. The main concerns dealt with wastewater management and water supply, but flood damage reduction planning, water oriented recreation, and environmental impacts were also considered. The Corps' Savannah District, conducted the MAAWRMS with the aid of an ad hoc Executive Group consisting of representatives of the Corps, the Atlanta

Regional Commission, Georgia Department of Natural Resources, the U.S. Environmental Protection Agency, and later the Georgia Mountains Area Planning and Development Commission. This group evaluated the water supply needs of the region and began formulating a long-range water supply plan including a detailed evaluation of the technical, economic, and environmental impacts of the most feasible alternatives. Over fifty different alternative water supply source plans, within and outside the region, were considered for meeting the area's water supply needs. From these alternative source plans the Executive Group recommended the plan, previously adopted by the Atlanta Regional Commission for Metropolitan Atlanta, that would meet 89 percent of estimated long range water supply needs from Lake Lanier and the Chattahoochee River.

In September 1978, an interim report on the MAAWRMS was completed. Based on the recommended water supply source plan four site specific alternatives were recommended for further study. These alternatives were:

1. Construct a reregulation facility downstream from Buford Dam.
2. Raise the normal summer pool elevation of Lake Lanier above 1071 and make additional weekend releases.
3. Increase the storage capacity of Morgan Falls Reservoir.
4. Redistribute week-day peak power releases from Buford Dam to off-peak periods on the weekend (Reallocation of Storage).

In 1981, a draft feasibility report for the MAAWRMS was coordinated with the agencies and public for comment. This report evaluated three final alternatives in comparable detail. The alternatives were:

1. Construct a reregulation dam downstream of Buford Dam.
2. Reallocate storage in Lake Lanier from hydropower to water supply.
3. Dredge Morgan Falls Reservoir to increase storage capacity.

The final MAAWRMS feasibility report and Environmental Impact Statement were approved by the Chief of Engineers in June 1982, and recommended the reregulation dam for construction since it was the plan that had the maximum net benefits to the nation. This report further recommended additional studies to address the impacts of the reregulation dam on water quality in the river, the Buford Trout Hatchery, and other unresolved issues. The Governor of Georgia and the Georgia Department of Natural Resources supported these recommendations. The Assistant Secretary of the Army for Civil Works reported to the Congress in January 1985 that the reregulation dam was feasible, but he recommended that the project be constructed by non-Federal interests. The final report was not transmitted to the Congress since no Federal action was required; however, Congress authorized the construction of the reregulation dam in Section 601 of the Water Resources Development Act of 1986 (P.L. 99-662), subject to the preparation of a General

Design Memorandum (GDM) and a supplemental EIS, and approval by the Secretary of Army and the Governor of Georgia.

Savannah District submitted the draft GDM and draft supplemental EIS to the South Atlantic Division office in March 1988. The investigations indicated that the net national economic development benefits of the reregulation dam and reallocation of storage alternatives were nearly equal. Consequently, it was decided that additional analyses should be performed. In October 1988, a revised GDM was submitted to the South Atlantic Division office recommending reallocation of storage at Lake Lanier as the most economical alternative for meeting the future water supply needs for the Atlanta region. The final GDM and draft supplemental EIS on the reregulation dam were submitted to the Chief of Engineers on November 25, 1988. The Governor of Georgia, Georgia Department of Natural Resources, and the Atlanta Regional Commission agreed that reallocation represented the preferred option. This change in the recommended alternative necessitated additional analyses and preparation of a Post Authorization Change (PAC) Report to support the reallocation recommendation.

In March 1989, the Mobile District began preparation of the PAC Notification Report to refine the future water supply needs for the Atlanta region to the year 2010. This report evaluated the storage that would have to be reallocated from hydropower to

water supply at Lake Lanier to satisfy these projected demands. The report also identified the associated impacts to all the project purposes, both upstream and downstream of Buford Dam. A draft PAC Report was coordinated with the agencies and public in Alabama, Florida, and Georgia in November 1989. This report included a proposed Water Control Plan (WCP) that had been developed to guide the management decisions for operating the Federal projects in the ACF Basin during all hydrologic conditions. This PAC Report also contained a draft Environmental Assessment that addressed the expected impacts of reallocation on the various resources in the basin. The report tentatively recommended the reallocation of 207,000 acre-feet (AF) of storage (141,700 AF for upstream users and 65,300 AF for downstream users) to meet the projected 529.4 million gallons per day (MGD) demand in the year 2010 (151.0 MGD for upstream users and 378.4 MGD for downstream users). The draft EA concluded that the overall impacts to lake levels and downstream flows needed to support navigation and meet State water quality standards would be minor.

The State of Florida has expressed concern over the timing and volume of flows released from Jim Woodruff Dam. These flows are critical to maintaining the ecological productivity and diversity of the Apalachicola River and Apalachicola Bay. The Corps has placed particular emphasis on determining the effects of the WCP and the increased demands for water supply in the Atlanta region on the discharges

from Jim Woodruff Dam. The impacts of the Lake Lanier reallocation on the current minimum release of 5,000-7,500 CFS were evaluated, and no significant adverse impacts to the environment would be expected.

Eight public meetings were held throughout the basin from November 15-21, 1989. Numerous statements and comments were received. The majority of these comments were concerned about the potential impacts to lake levels in Lake Lanier and the recreation industry; potential impacts to flows downstream and associated impacts to water quality, water supply, fish and wildlife, power production, and navigation; and the need to address cumulative impacts of reallocations by the preparation of an EIS.

The numerous letters, telephone calls and meetings since the public meetings with representatives of the States of Alabama, Florida and Georgia, and the general public, have been utilized in an attempt to further explain and coordinate the findings in the draft PAC Report. Special emphasis has been placed on sharing and explaining the WCP model and the expected condition of lake levels and flows in the future should a drought as severe as the 1986-88 drought reoccur. Efforts have also been made to help the states resolve underlying water rights issues related to providing additional water supply from the Chattahoochee River.

In addition to our efforts at Lake Lanier, the Corps is evaluating the need to reallocate storage for water supply purposes from Allatoona and Carters Lakes to meet short-term water supply needs. These needs are 38.5 MGD from Allatoona Lake and 2 MGD from Carters Lake. The Carters Lake Reallocation Report has been coordinated with the agencies and public, and has been forwarded to the Office of the Chief of Engineers for approval. An executive summary of the Lake Allatoona report was coordinated with the agencies and public in October 1989. The report is currently being revised to address agency and public concerns.

In an effort to resolve concerns regarding downstream cumulative impacts which may result from these and future water needs downstream of Atlanta the Army is undertaking a comprehensive study of the future water supply and other water resource needs in the ACF and Alabama-Coosa River Systems. We anticipate that the comprehensive study will provide an opportunity for the states to address water rights issues and to address the cumulative impacts on fish and wildlife habitat.

Regarding water supply contracts for actual use of water, Lake Lanier has been used for water supply from the day it became fully operational in 1958. Contracts with the Cities of Gainesville and Buford, Georgia, were entered into on June 22, 1953 and December 19, 1955, respectively, for 8 and 2 MGD, respectively. The contracts were necessary because these entities used the Chattahoochee River as a

source of water supply prior to its impoundment. Interim withdrawal contracts for the right to use water from Lake Lanier have also been entered into with Gwinnett County in 1973, 1974, 1985, and 1988 (average 53 MGD per annum); City of Cumming in 1978, 1985, and 1988 (average 10 MGD per annum); the City of Gainesville in 1987 (average 20 MGD per annum or an additional 12 MGD to the original contract); and Atlanta Regional Commission in 1986 (377 MGD peak day withdrawal from the Chattahoochee River). These interim contracts, which expired on December 31, 1989, did not guarantee permanent use of the water, but were entered into as a means to permit water supply withdrawals until permanent storage contracts could be accomplished. These interim contracts allowed the entities to withdraw a specified amount of water per day.

Since the interim water withdrawal contracts expired on December 31, 1989, the Corps has proposed that new interim water supply contracts be signed to provide similar water supply amounts for these entities until formal storage contracts can be implemented. The processing of these new contracts along with the proposed reallocations at Lake Lanier, Allatoona Lake and Carters Lake is the subject of a lawsuit filed by the State of Alabama on June 28, 1990. We are currently working with the States and the Department of Justice to develop a Memorandum of Understanding which, if acceptable to all parties, would guide the processing of these contracts in the future.

In summary, the Corps has tried to be responsive to the water supply needs of the Atlanta region within existing authorities while maintaining a balance with other project purposes upstream and downstream of Buford Dam. There are many issues facing us today. I believe the Comprehensive Study provides a unique opportunity to address these issues in a proactive, responsible manner while evaluating the long-range water needs of the basins and that real progress can be made toward basinwide water management through this study.

I again appreciate the opportunity to testify before the Subcommittee on Water Resources. Members of my staff and I stand ready to answer any questions you may have regarding the issue of reallocation.

TESTIMONY OF MR. WILLIAM J. TROXEL, ASSISTANT PROJECT LEADER, PANAMA CITY FIELD OFFICE, U.S. FISH AND WILDLIFE SERVICE, DEPARTMENT OF THE INTERIOR, BEFORE THE SUBCOMMITTEE ON WATER RESOURCES, COMMITTEE ON PUBLIC WORKS AND TRANSPORTATION, REGARDING THE EFFECTS OF REALLOCATING WATER FROM LAKE SIDNEY LANIER ON WATER QUALITY DOWNSTREAM

September 29, 1990

Mr. Chairman, my name is William Troxel. I am the Assistant Project Leader of the Panama City, Florida, Field Office of the U.S. Fish and Wildlife Service (Service). My office is responsible for activities related to fish and wildlife resources throughout the Apalachicola-Chattahoochee-Flint (ACF) River Basin, and I appreciate the opportunity to discuss the proposed water reallocation from Lake Sidney Lanier.

I would like to address three main issues:

- the cumulative water quality impacts on fish and wildlife resources from the water reallocation,
- Service activities in evaluating the effects and possible measures to prevent any adverse impacts, and
- our Planning Aid Report recommendations.

Water Quality Impacts

The Mobile District of the U.S. Army Corps of Engineers has prepared the Lake Lanier Water Control Plan and Post-Authorization Change report. The data contained in this report suggests minimal

impacts to fish and wildlife resources through implementation of the reallocation proposal. However, we believe that the cumulative effects on fish and wildlife resources cannot be adequately determined since the Corps report dealt only with Federal water reallocations. Examples of information needs include:

(1) the effects of water level and water quality changes throughout the basin on fish spawning, waterfowl, and wading bird habitats and populations;

(2) the effects of this proposal and the City of Atlanta's changed water use patterns on the quantity, quality, and timing of flow below Atlanta, as well as impacts on the Chattahoochee River and reservoirs; and

(3) the cumulative effects of the present proposal in conjunction with Atlanta's water use after 2010, present and future water use by other communities in the basin, and present and future groundwater withdrawals for irrigation.

Since the Post-Authorization Change report did not address comprehensive cumulative impacts, the report's finding of "minimal impacts" may be questionable. The Service therefore is concerned about the cumulative impacts that such a water allocation scenario would have on resources in the ACF basin.

Fish and Wildlife Service Activities

Service activities directly related to the water reallocation plan began in the early 1980's with coordination efforts on the Atlanta Metro Study. The current water allocation plan is a product of the original study.

The Service has not been a participant in the direct development of the reallocation plan and the Water Control Plan, but has prepared a Planning Aid Report on the proposal under the Fish and Wildlife Coordination Act. Our report discussed the fish and wildlife resources of the basin with emphasis on anadromous fish species. We also expressed a concern for the inadequacy of data on water quality, quantity, and timing of releases below Lake Lanier due to drainage water use and present and future development patterns.

Our report was submitted to the Mobile District of the Corps in December 1989. To date, the Service has not been contacted by the Corps regarding any additional activities planned for the ACF Basin.

Planning Aid Report Recommendations

As noted previously, the Service reviewed the available data and concluded that the proposed Lake Lanier Post Authorization Change report does not quantify current or cumulative impacts to fish and wildlife or their habitats.

Based on our involvement in planning for this project, the Service hopes that the following recommendations which were included in

our Planning Aid Report will be considered in planning for water reallocation in the ACF System:

(1) Since the project may impact salinity levels in the Apalachicola estuary, it may be necessary to amend the project purpose to incorporate providing freshwater flows to the Apalachicola estuary in order to maintain seafood production.

(2) A basin-wide ACF water use plan and water budget should be developed to address future long-term needs.

(3) A tri-state compact capable of developing and implementing a basin-wide plan should be established.

(4) Since the potential cumulative impacts of this project have not been fully assessed, consideration should be given to supplemental NEPA assessments to assess direct and indirect effects on fish and wildlife resources as well as mitigation actions developed by the Corps of Engineers.

Mr. Chairman, the Service is concerned that the cumulative impacts from the proposed reallocation be assessed in order to avoid negative environmental impacts to the aquatic resources throughout this river basin system. We would therefore hope that these recommendations be considered.

Mr. Chairman, thank you for the opportunity to testify before the Subcommittee. I will be happy to respond to questions.

September 29, 1990

Good morning My name is Virginia Wetherell and I am the Deputy Assistant Executive Director for Land Resources at the State of Florida's Department of Natural Resources. I am here today as Chairman of the Governor's Coastal Resources Interagency Management Committee to briefly provide you with our concerns about the proposed Post-Authorization Change Notification Report for the Reallocation of Storage from Hydropower to Water Supply at Lake Lanier, Georgia and describe our views on water supply allocations and management of the Apalachicola-Chattahoochee-Flint Rivers System. Our staff has assembled the Report on the Apalachicola-Chattahoochee-Flint Rivers Basin, which was provided to you earlier this week. My remarks are intended to highlight areas covered in detail in the Report.

Apalachicola River and Bay are among the most ecologically diverse and significant riparian and estuarine areas in the Southeastern United States. Florida has recognized the importance of the region by affording these water bodies with our highest levels of protection: designations of the Bay as an Aquatic Preserve, both the River and Bay as Outstanding Florida Waters, and of Franklin County as an Area of Critical State Concern. Florida has committed over $29.5 million for acquisition of land along the River and Bay and for upgrading of domestic wastewater treatment facilities. The Bay has been federally designated as a National Estuarine Research Reserve and an International Biosphere Reserve. We have invested too much financially and emotionally in this Basin too stand by and watch as the very life-blood of the system is threatened.

You have come here today to conduct a hearing on the downstream impacts of water supply allocation and management on the ACF Basin. Florida has been considering these impacts for some time. For over ten years, Florida has struggled to obtain recognition of basin-wide water management as the only appropriate viewpoint for decision making purposes. We thought that as a result of an agreement made in 1983, a Memorandum signed by the Mobile District Corps of Engineers, Alabama, Georgia, and Florida, decisions in the basin would be based upon a comprehensive water management plan developed jointly by the three states and implemented by the Corps. We unfortunately discovered that after the other parties obtained their relief through the agreement, Florida was left with a shelf full of documents and a memory of the promises made. Not until the Atlanta area was faced with water supply problems, did the subject of a comprehensive basin-wide water management plan or strategy come back to the table for discussion, but this time the issue was water supply allocation.

The State's review of the Post-Authorization Change Report or PAC, was coordinated through all state agencies pursuant to the provisions of the Governor's Executive Order and the federally approved Coastal Management Program for Florida. The State notified Colonel Larry S. Bonine, then District Engineer for the Mobile District Corps of Engineers, on February 5 of this year

that the PAC was inconsistent with Florida's Coastal Management Program. Florida objected to the proposed Water Control Plan and the Finding of No Significant Impact as well. The objection was based, in part, on the Corps' failure to adequately consider the possible effects of the changes proposed on Apalachicola River and Bay. All of the State agencies responsible for reviewing the documents agreed that, without an understanding of how much freshwater flow was required to ensure the long term ecological diversity and productivity of Apalachicola River and Bay, reallocation from one purpose to another within Lake Lanier was premature. The management of water within the entire basin was for the first time described within the context of a Water Control Plan, which again did not have adequate considerations for freshwater supply to Apalachicola River and Bay.

Florida has experienced severe drought conditions during the 1980's which allowed salt water intrusions into Apalachicola Bay, and undetermined losses in freshwater ecosystems along the River. Whether these droughts were prolonged or made more severe by the activities of man within the Basin is not a question of fact but more a question of to what extent. We know that reduced water flows in the 1980's produced record low water levels on the Apalachicola River. We wonder if the 1980's represent the future and if so, what will happen to this vitally important system? We submit to you today that without a comprehensive basin-wide frame of reference, decisions which may seem minuscule in their magnitude may indeed be monumentous from a basin-wide perspective. Water supply during the wet season or during years where rainfall is above average is not at issue. Water supply during droughts and years of lower than average rainfall is what we are concerned about. Decisions which permanently allocate water storage to one purpose or another, determine the provision of water during droughts. Water needed to provide irrigation for agricultural fields in Georgia, industrial supplies in both Georgia and Alabama, and drinking water to the Atlanta area, is also in demand for hydropower production, provision of navigation flows, and recreational levels in the federally authorized reservoirs. What is left over after everyone has had their turn upstream is then received by the Apalachicola River and delivered to the Bay. That flow must carry vital nutrients during the floods and be sufficient during other parts of the year to provide adequate freshwater to mix with the salty waters of the Gulf of Mexico to provide the proper salinity for survival of the estuary that produces millions of dollars of seafood for both Florida's and the nation's economy. To manage the water within the ACF Rivers during drought conditions, the Corps of Engineers must turn to their Water Control Plan, which is based on the authorized project purposes of each of the reservoirs and the federal works in the River's themselves. We submit to you today that the freshwater needs of Apalachicola River and Bay need to be elevated to the same level of importance as drinking water, hydropower, navigation, and recreation.

Florida was not alone in objecting to the Corps proposal and

when water supply contracts were proposed to be signed between the Corps and water supply entities within Georgia, the State of Alabama filed suit in Federal court. Florida subsequently filed a motion to intervene because of its concerns regarding freshwater flow to Apalachicola River and Bay. While the Corps has proposed a Comprehensive Basin-Wide Study, which we support, the short-term water supply decisions that must be made before the completion of the proposed Study must consider the freshwater supply needs of Apalachicola River and Bay. We have agreed to support the appropriation of funding to the Corps for conducting the Comprehensive River Basins Studies and we are considering an agreement with the States of Alabama and Georgia, and the Corps, to allow short term water supply contracts for the Atlanta area to be signed. If we agree to drop the litigation in return for promises of a comprehensive study, we must know that the agreement we make will be meaningful and enforceable. We do not want to have history repeat itself and have nothing to show for our efforts after another five years. The comprehensive study is only a means to determine what actions are necessary to meet all of the needs of the water uses in the ACF Basin. Having a study without implementing the actions identified will not be acceptable. Until we have completed the comprehensive study, we must be guaranteed that historical flows will be met through the management of the Chattahoochee and the Flint. The Corps cannot produce water when there is no water, so we anticipate having the assistance of both Alabama and Georgia in ensuring that future water losses are minimized and that efforts are made to regulate all withdrawals from this basin. Returning water to the rivers, after use, must be done in consideration of protecting the quality of that water. Adequate treatment of domestic and industrial wastes must be provided and it may be necessary to review the quality of return flows from agricultural systems. Certainly we would anticipate growth management to be a reality throughout this basin during the comprehensive studies. Until we understand the impacts of the changes that have already been made to this Basin, we should minimize future changes.

Florida has demonstrated its intentions of protecting Apalachicola River and Bay through financial expenditures, protective legislation, and an active role in participating in the settlement negotiations among the Corps, and the other states. We have been tough on water quality permits and we continue to carefully regulate provision of the federally authorized navigation channel through both the River and the Bay. We are supporting additional expenditures over the next several years through our Water Management District, our Department of Environmental Regulation, and our Department of Natural Resources. We ask that our financial investment be protected by careful consideration of any short-term water supply decisions and that no long-term changes in allocations be made until the completion of the Comprehensive Studies proposed by the Corps. Finally, we ask that historical flows be provided to the Apalachicola River through the management efforts of the Corps and the regulatory assistance of the States of Alabama and

Georgia.

In conclusion, let me summarize the unified position of the State. First, no permanent water supply allocation decisions should be made until completion of the Comprehensive Study of the Apalachicola-Chattahoochee-Flint River Basin. Short-term water supply contracts should only be allowed during the course of the Study if it can be scientifically demonstratated that the withdrawals will not have any significant effect on Apalachicola River and Bay. The beneficiaries of these short term contracts should be notified that these interim provisions may have to be changed after completion of the Comprehensive Study. The provision of flows equal to historical amounts on a weekly basis must be accomplished. Efforts to provide historical flows must include managing water in all of the federal reservoirs and managing withdrawals from the non-impounded Flint River. Finally, the freshwater supply needs of Apalachicola River and Bay need to be elevated to the highest level of protection by making the provision of those needs an authorized project purpose of the federal projects for the Apalachicola-Chattahoochee-Flint River System.

I look forward to working with you in any way possible to bring about these changes. Thank you for the opportunity to provide this testimony for you consideration. If you have any questions on my presentation or on the Report provided to you, I would be happy to address them.

ADDITIONS FOR THE RECORD

FLORIDA DEPARTMENT OF EDUCATION
Betty Castor
Commissioner of Education

September 29, 1990

Honorable Henry Nowak
Chairman, Water Resources Subcommittee
Room 2165, Rayburn House Office Building
Washington, D.C. 20515

Dear Mr. Chairman:

My travel schedule does not enable me to be with you this morning, but I want to state for the record my objection to the U.S. Army Corps of Engineers' proposed plan to re-allocate water from the Apalachicola-Chattahoochee-Flint Rivers system in an effort to off-set Atlanta's water needs. Scientific expertise and experience inform us that such a diversion would have probable adverse system-wide ramifications that cannot be justified at this time.

I empathize with those in Georgia who are struggling with the realities of exhausted water supplies. Those of us in Florida are all too familiar with this troublesome reality, and we are taking reactive and proactive steps to address our needs responsibly. Of the many measures Florida is taking, one of the most important is planning. In our comprehensive planning process -- Florida's concerted effort to guide and manage growth -- the adequacy of our groundwater supply is an important factor. Where appropriate we are encouraging the use of recycling, such as using treated wastewater for irrigation and power plant needs. We are successfully using desalinization techniques and exploring other ways we can be innovative with our technological capabilities both now and in the future. We are also encouraging, and in some extremely serious cases we are mandating, conservation behavior. Public education, through the media and the classroom, plays an important role in this effort.

Florida has laws on the books and rules on the table to help guide our efforts because we know that this issue will not diminish over time but rather demand increasing attention. I suggest that our neighbors in Georgia may find it helpful to come work with the people in our agencies and water management districts to craft a strategic water plan that will meet their needs.

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But the proposal we are considering here today is not an issue concerning one state, one water body, or one consumptive concern. When considering any activity within the Apalachicola-Chattahoochee-Flint Rivers Basin, we must keep our eye on the big picture. The expressed vested interest of Georgia, Alabama, and Florida in this proposal brings to light an excellent example of interdependency and further illumines the need for interstate cooperation guided by an informed plan of management. However, to effectively manage the basin we must fully understand the system. Toward that objective, I support the comprehensive studies of the Apalachicola-Chattahoochee-Flint Rivers Basin proposed by the U.S. Army Corps of Engineers. We must understand the system's ability to meet water supply needs of the area in terms of present and anticipated conditions, and we must ensure that areas of need are officially recognized. To not go to the effort and expense to obtain this information is to render useless state efforts to protect affected waters; Floridians continue to work tirelessly to safeguard the ecological health and well-being of the Apalachicola River and Bay and are acutely aware of this fact.

I appreciate the opportunity to comment. Let me know how I can be of further assistance.

Sincerely,

Betty Castor
Commissioner

BC:rat

l:water

GOVERNOR'S WORKING GROUP ON THE
APALACHICOLA BAY OYSTER AQUACULTURE PROJECT
Post Office Box 144, Apalachicola, Florida 32320
904-653-2202

September 28, 1990

Congressman Bill Grant,
930 Thomasville Road, Suite 101
Tallahassee, Florida, 32303

Dear Congressman Grant:

As you are aware, the State of Florida has joined the three state committee to consult on the Apalachicola-Chattahochee-Flint River system. Florida's interest is in protecting the Apalachicola Bay national estuary and the oystering and fishing industry

It was determined that a study would be made to determine the effect on the river system of drawing off substantial quantities of water for use in Atlanta and the resultant effect on the quantity and quality of water on downstream users.

To my knowledge, the study has not been completed. We regard accelerating the taking of water from Lake Lanier for Atanta as premature.

We are anxious to be of support to you in your quest to represent the State's interest in this manner.

Sincerely,

George L. Chapel

George Chapel
Chairman

STATEMENT OF
GEORGIA DEPARTMENT OF NATURAL RESOURCES

TO

WATER RESOURCES SUBCOMMITTEE
COMMITTEE ON PUBLIC WORKS AND TRANSPORTATION
U.S. HOUSE OF REPRESENTATIVES

Hearing on long-term water supply needs of the Atlanta region
from the Apalachicola-Chattahoochee-Flint River Basin
and the operation of Buford Dam and Lake Sidney Lanier
in meeting those needs.

September 29, 1990
Tallahassee, Florida

The Georgia Department of Natural Resources (DNR) appreciates the opportunity to submit this statement for the record of the September 28, 1990 and September 29, 1990 hearings of the Water Resources Subcommittee of the Committee on Public Works and Transportation of the U.S. House of Representatives. The Subcommittee is conducting the field hearings on the long-term water supply needs of the Atlanta region from the Apalachicola-Chattahoochee-Flint River Basin and the operation of Buford Dam and Lake Sidney Lanier in meeting those needs.

The State of Georgia has long realized the importance of water resources management in the Chattahoochee River Basin and the entire State. In 1972, the first of a series of State laws was enacted to allocate water and to protect the water rights of all users. These laws, and the subsequent water management and permitting program administered by DNR, are based on sharing Georgia's water resources amongst all users.

Under the 1972 Groundwater Use Act, the 1977 Water Quality Control Act and later amendments to both Acts, DNR requires any withdrawal of water exceeding 100,000 gallons per day from ground water or surface water sources (wells, springs, lakes, rivers, etc.) to be permitted. Prior to receipt of a water withdrawal permit, an applicant must demonstrate that the proposed water use is reasonable and will not interfere with downstream water uses. In addition, the applicant must demonstrate the use of effective water conservation practices and must ensure that any wastewater returned to a river or lake be treated to meet State and Federal water quality standards.

Georgia's comprehensive water withdrawal permitting program is unique in the Southeast and extremely effective in managing water resources. Of the two other states sharing the Apalachicola-Chattahoochee-Flint River Basin, Florida has a program for allocating water and permitting withdrawals; Alabama does not. The Georgia Department of Natural Resources, by issuing water withdrawal permits only when downstream users are protected, is able to ensure equitable allocation of water use statewide. Water withdrawal permits specify a cap, or limitation, on the quantity of water to be withdrawn. Municipal and industrial water withdrawals must be monitored to measure, record, and report the quantity of water withdrawn. Exceedences of permitted withdrawal limitations result in enforcement actions by the Department of Natural Resources. The Georgia Water Quality Control Act provides for penalties of up to $100,000 a day for violations.

Water conservation is a key element in managing Georgia's water resources. The Department of Natural Resources has the authority to restrict water usage during water shortage periods. This authority is frequently used and is effective in reducing water withdrawals. For example, in the summer of 1988, approximately 50 million gallons per day of water was saved in the metropolitan Atlanta area by the use of outdoor water restrictions. In addition to drought contingency actions to conserve water, State law requires that any new or renovated plumbing incorporate state-of-the-art flow-restriction and water saving devices. Georgia is among only a handful of states in the nation with this requirement.

The overwhelming consideration in managing water resources and making and implementing water resource decisions is the understanding that water is a shared resource. This is especially important in the Chattahoochee River Basin. With this in mind, the Department of Natural Resources has carefully considered the water supply needs of the local governments in the metropolitan Atlanta and Lake Lanier area along with the needs of all other water users on the Chattahoochee Basin. The Department has also reviewed the proposal of the U.S. Army Corps of Engineers to reallocate a portion of the power pool of Lake Lanier to meet water supply needs. The year 2010 water supply demands of the metropolitan Atlanta communities can be met with this reallocation without affecting the water users downstream or upstream of the Atlanta area. Consequently, the Department supports the proposed reallocation, which also has the least environmental impacts of the water supply options for the Atlanta area.

Reallocation of a portion of the hydroelectric power storage pool does not cause any more or less water to be used. It merely reduces the five weekday releases for hydroelectric power generation, and then releases the saved water on the weekends. The result would be a more even flow of water out of Lake Lanier over a 7-day period, but no more or less water would be released each week.

In the year 2010, Chattahoochee River Basin water loss in the Atlanta and Lake Lanier area (as a result of line leaks, lawn watering, septic tanks and some wastewater discharges in other basins) could be as high as 148 million gallons per day. This loss is insignificant when compared with Chattahoochee and Apalachicola River flows. The projected year 2010 water loss is only:

6% of the annual river flow at Atlanta

4% of the annual river flow at West Point Lake Dam (Georgia/Alabama state line)

1.2% of the annual river flow at the Georgia/Florida state line.

This minute loss of river flow does not impair the important water uses (such as water supply, hydropower, recreation, fishing, navigation, oyster harvesting) of the Chattahoochee and Apalachicola Rivers. A 1.2% loss in the Apalachicola River equates to one inch of depth in that river.

The Georgia Department of Natural Resources (DNR) firmly supports comprehensive consensus-building studies to evaluate and identify water resource decisions. The study performed by the Corps of Engineers recommending the reallocation of a portion of the storage of Lake Lanier is very beneficial. Further studies to examine basin-wide water needs beyond the year 2010 are appropriate. DNR has already prepared a year 2050 water supply plan for a forty-four county area of north Georgia. This can be incorporated into future studies. DNR looks forward to working with the U.S. Army Corps of Engineers, and the States of Alabama and Florida on a comprehensive study once the lawsuit filed against the Corps of Engineers by the State of Alabama is resolved.

APALACHICOLA BAY OYSTER FARMERS ASSOCIATION
Post Office Box 144, Apalachicola, Florida, 32320
904-653-2202

September 28, 1990

Congressman Bill Grant
930 Thomasville, Florida, Suite 101
Tallahassee, Florida 32303

Dear Congressman Grant:

Subject: Water Management on the Tri-River System

As you are aware, Florida's interest in the Apalachicola-Chattahochee-Flint River System is in protecting the Apalachicola Bay national estuary and the oystering and fishing industry. Our acreage is shrinking with regard to oyster production. The floodplain has not been flooded in a decade.

It is our concern that any more water being drawn off would be detrimental to the seafood industry in Apalachicola Bay. We would appreciate it if a proper study of effluent, upriver permitting and usage as well as the resulting impact on the Bay could be conducted before any further water is drawn off.

We are anxious to be of support to you in your quest to represent the state's interest in this matter.

Sincerely

David Jones
President